BENCHMARK
ENVIRONMENTAL
ENGINEERING &
SCIENCE, PLLC

September 25, 2014

Mr. Anthony Lopes, P.E.
Project Manager
New York State Department of Environmental Conservation
Division of Environmental Remediation, Region 9
270 Michigan Avenue
Buffalo, New York 14203-2999

Re: Final Site Management Plan
154 South Ogden Street Site (BCP Site No. C915268)
Buffalo, New York

Dear Mr. Lopes:

On behalf of our client, 154 South Ogden, LLC, Benchmark Environmental Engineering & Science, PLLC has prepared the enclosed Site Management Plan (SMP) for your review and approval. A complete electronic copy of the Report is included on the CD in Appendix F of the hard copy. In addition, one hard copy (with electronic version on CD) will be placed at the Lafayette Square and the East Clinton Branches of the Buffalo & Erie County Public Library system for public review.

Please do not hesitate to contact me with any questions.

Sincerely,
TurnKey Environmental Restoration, LLC

Bryan Hann
Project Manager

c: J. Neimeier (154 South Ogden, LLC)
M. Doster (NYSDEC – Region 9)
W. Kuehner (NYSDOH)
C. Slater (Slater Law)
T. Forbes (Benchmark)
B. Hann (Benchmark)

File: 0249-012-011

Site Management Plan

154 South Ogden Street Site

BCP Site No. C915268
154 South Ogden Street
Buffalo, New York

September 2014

0249-012-011

Prepared For:

154 South Ogden LLC

Prepared By:

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BROWNFIELD CLEANUP PROGRAM

SITE MANAGEMENT PLAN

154 SOUTH OGDEN STREET SITE
NYSDEC SITE NUMBER: C915268
BUFFALO, NEW YORK

September 2014 0249-012-011

Prepared for:

154 South Ogden, LLC
2219 South Park Avenue
Buffalo, NY 14220

Prepared By:

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Revisions to Final Approved Site Management Plan:

Revision #	Submitted Date	Summary of Revision	DEC Approval Date

SITE MANAGEMENT PLAN
154 South Ogden Street Site

Table of Contents

Table of Contents

SITE MANAGEMENT PLAN
154 South Ogden Street Site

Table of Contents

LIST OF TABLES

LIST OF FIGURES

APPENDICES

1.0 INTRODUCTION AND DESCRIPTION OF REMEDIAL PROGRAM

1.1 Introduction

This document is required as an element of the remedial program at 154 South Ogden Street in the City of Buffalo, New York (hereinafter referred to as the "Site") under the New York State (NYS) Brownfield Cleanup Program (BCP) administered by New York State Department of Environmental Conservation (NYSDEC). The site was remediated in accordance with Brownfield Cleanup Agreement (BCA) Index#C915268-10-12, Site #C915268, which was executed on November 13, 2012.

1.1.1 General

154 South Ogden, LLC entered into a BCA with the NYSDEC to remediate a 21 acre property located in the City of Buffalo, Erie County, New York. This BCA required the Remedial Party, [154 South Ogden, LLC], to investigate and remediate contaminated media at the site. A figure showing the site location and boundaries of this 21-acre "site" is provided in Figure 1. The boundaries of the site are more fully described in the metes and bounds site description that is part of the Environmental Easement (Appendices A and B).

After completion of the remedial work described in the Remedial Action Work Plan, some contamination was left in the subsurface at this site, which is hereafter referred to as "remaining contamination." This Site Management Plan (SMP) was prepared to manage remaining contamination at the site until the Environmental Easement is extinguished in accordance with ECL Article 71, Title 36. All reports associated with the site can be viewed by contacting the NYSDEC or its successor agency managing environmental issues in New York State.

This SMP was prepared by Benchmark Environmental Engineering & Science, PLLC, on behalf of 154 South Ogden, LLC, in accordance with the requirements in NYSDEC DER-10 Technical Guidance for Site Investigation and Remediation, dated May 3, 2010, and the guidelines provided by NYSDEC. This SMP addresses the means for implementing the Institutional Controls (ICs) and Engineering Controls (ECs) that are required by the Environmental Easement for the site.

1.1.2 Purpose

The site contains contamination left after completion of the remedial action. Engineering Controls have been incorporated into the site remedy to control exposure to remaining contamination during the use of the site to ensure protection of public health and the environment. An Environmental Easement granted to the NYSDEC, and recorded with the Erie County Clerk, will require compliance with this SMP and all ECs and ICs placed on the site. The ICs place restrictions on site use, and mandate operation, maintenance, monitoring and reporting measures for all ECs and ICs. This SMP specifies the methods necessary ensure compliance with all ECs and ICs required by the Environmental Easement for contamination that remains at the site. This plan has been approved by the NYSDEC, and compliance with this plan is required by the grantor of the Environmental Easement and the grantor's successors and assigns. This SMP may only be revised with the approval of the NYSDEC.

This SMP provides a detailed description of all procedures required to manage remaining contamination at the site after completion of the Remedial Action, including: (1) implementation and management of all Engineering and Institutional Controls; (2) media monitoring; (3) performance of periodic inspections, certification of results, and submittal of Periodic Review Reports; and (4) defining criteria for termination of treatment system operations.

To address these needs, this SMP includes an Engineering and Institutional Control Plan for implementation and management of EC/ICs..

This plan also includes a description of Periodic Review Reports for the periodic submittal of data, information, recommendations, and certifications to NYSDEC.

It is important to note that:

- This SMP details the site-specific implementation procedures that are required by the Environmental Easement. Failure to properly implement the SMP is a violation of the environmental easement, which is grounds for revocation of the Certificate of Completion (COC);
- Failure to comply with this SMP is also a violation of Environmental Conservation Law, 6NYCRR Part 375 and the BCA (Index #C915268-10-12; Site #C915268) for the site, and thereby subject to applicable penalties.

1.1.3 Revisions

Revisions to this plan will be proposed in writing to the NYSDEC's project manager. In accordance with the Environmental Easement for the site, the NYSDEC will provide a notice of any approved changes to the SMP, and append these notices to the SMP that is retained in its files.

1.2 Site Background

1.2.1 Site Location and Description

The site is located in the City of Buffalo, County of Erie, New York and is identified as a portion of Block 1 and Lot 4 on the City of Buffalo Tax Map 123.15. The site is an approximately 21-acre area bounded by the Buffalo River to the north, vacant property, a cell tower and Mineral Spring Road to the south, South Ogden Street to the east, and railroad tracks and power lines to the west (see Figure 1). The boundaries of the site are more fully described in Appendix A – Metes and Bounds.

1.2.2 Site History

The site is currently developed with a school building and is zoned for residential and commercial use. The surrounding parcels are currently used for a combination of residential, commercial, and rail/power right-of-ways. The nearest residential area is directly east of the Site across South Ogden Street.

Until 2013, the site was vacant, vegetated with grasses, emergent trees, and invasive species (e.g., knotweed). Prior uses that appear to have led to site contamination include past solid waste disposal over a majority of the site. Historical records indicate that the site was not previously developed. A portion of the property was historically traversed by the Buffalo River and filled when the river channel was straightened to its current configuration.

Several previous environmental studies were completed at the Site include a Phase I Environmental Site Assessment (Ref. 1), a Test Pit Investigation (Ref. 2), a Supplemental Phase II Site Investigation (Ref. 3), and a Geotechnical Evaluation (Ref. 4). The previous environmental investigations identified the presence of soil impacted with volatile organic compounds (VOCs) associated with an apparent historical petroleum release, and the

presence of fill material containing elevated concentrations of semi-volatile organic compounds (SVOCs) and select heavy metals. A NYSDEC Spill file (No. 11-12887) was opened to address the previously-discovered petroleum impacted soil; however, the Spill file was administratively closed as management of remedial efforts was transferred to the Brownfield Cleanup Program. Details of the subsequent Remedial Investigation are provided in Section 1.2.4, below.

1.2.3 Geologic Conditions

The soil type at the site is generally described as sandy clay with silt intermingled with waste material (ash, black sand, brick, wood, glass), underlain by native poorly graded sand with silt. Two hydrogeologic cross-sections are shown in Figures 2 and 3. Groundwater depth is approximately 12-19 feet below ground surface (fbgs), and generally flows north to northwest toward the Buffalo River. A groundwater flow figure is shown in Figure 4.

1.3 Summary of Remedial Investigation Findings

A Remedial Investigation (RI) was performed to characterize the nature and extent of contamination at the site. The results of the RI are described in detail in the Remedial Investigation/Interim Remedial Measures/Alternatives Analysis Report prepared by Benchmark and dated April 2013 (revised March 2014).

Generally, the RI determined the following contaminants of concern in Site soil and/or groundwater: lead, arsenic, polycyclic aromatic hydrocarbons (PAHs) (particularly benzo(a)pyrene), chlorobenzene, 1,2-dichlorobenzene, and cis-1,2-dichloroethene. Below is a summary of site conditions when the RI was performed in January 2013 with a supplemental investigation completed in March 2013:

<u>Soil/Fill</u>

Site soil/fill contained elevated concentrations of polycyclic aromatic hydrocarbons (PAHs), metals, and weathered petroleum constituents. The PAHs detected are consistent with incomplete combustion typically found in ash, cinders, and asphalt materials such as pavement and roofing shingles, all of which were identified in surface and subsurface soil at the Site. Total PAHs exceeded the CP-51 guidance for non-residential sites of 500 ppm at

only one location. Select metals were detected in soil/fill at concentrations above the RRSCOs at one or more location including arsenic, barium, cadmium, copper, lead, and mercury. A summary of RI soil contamination prior to the remedy is presented in Table 1.

Site-Related Groundwater

Groundwater samples indicated minor exceedances of Class GA Groundwater Quality Standards/Guidance Values (GWQS/GVs) for certain parameters in localized areas of the Site. Petroleum-based compounds were detected in well MW-2 at relatively low concentrations but above the GWQSs; MW-2 is located in the vicinity of the petroleum-impacted soil/fill. Monitoring well MW-4, located on the western portion of the Site, contained relatively low concentrations of cis-1,2-dichloroethene (cis-1,2-DCE) but above the GWQS. Inorganic compounds detected in groundwater at concentrations above GWQS/GVs were generally limited to naturally occurring minerals such as iron, magnesium, manganese, and sodium. No odors or sheen were noted during monitoring well development or sampling. A summary of RI groundwater contamination prior to the remedy is presented in Table 2.

Site-Related Soil Vapor Intrusion

A vapor barrier and a passive sub-slab depressurization system were planned for under the newly constructed building to prevent against the potential of vapor intrusion. On June 18, 2014, a soil vapor intrusion study was conducted beneath the school building. Based on the analytical data, it was determined only the vapor barrier was deemed necessary by the NYSDEC and NYSDOH. A summary of RI soil vapor intrusion data is presented in Table 3.

1.4 Summary of Remedial Actions

The site was remediated in accordance with the NYSDEC-approved Interim Remedial Measure Work Plan dated April 2013 and revised June 2013.

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

1. Limited excavation and off-site disposal of approximately 1,810 tons of contaminated soil/fill impacted by metals, PAHs, petroleum, and mixed asphalt debris from nine discrete areas of concern (AOCs).

2. Placement of a vapor barrier beneath the newly constructed building to prevent against the potential of vapor intrusion.
3. Construction and maintenance of a soil cover system consisting of the Site access road, school building foundation, concrete sidewalks, and soil cover placement to prevent human exposure to remaining contaminated soil/fill remaining at the site.
4. Execution and recording of an Environmental Easement to restrict land use and prevent future exposure to any contamination remaining at the site.
5. Development and implementation of a Site Management Plan for long term management of remaining contamination as required by the Environmental Easement, which includes plans for Institutional and Engineering Controls and reporting.
6. Periodic certification of the institutional and engineering controls listed above.

Remedial activities were completed at the site from May 2013 through January 2014.

1.4.1 Removal of Contaminated Materials from the Site

The following nine AOCs were remediated:

- Metals-impacted (arsenic) AOC SS-6: excavation of approximately 87.5 tons within an approximate 20 by 20 foot area to an average two-foot depth;
- Petroleum-impacted AOC SB-4: excavation of approximately 652 tons within an approximate 33 by 38 foot area to an approximate 17 foot depth based on visual and olfactory petroleum-like odor;
- PAH-impacted AOC SB-14: excavation of approximately 255 tons within an approximate 30 by 30-foot area to an average six-foot depth;
- PAH-impacted AOC SB-16: excavation of approximately 80.5 tons within an approximate 20 by 20-foot area to an average four-foot depth;
- Metals-impacted (lead) AOC SB-20: excavation of approximately 86 tons within an approximate 20 by 20 foot area to an average five-foot depth;
- Metals-impacted (arsenic and lead) AOC SB-27: excavation of approximately 94 tons within an approximate 20 by 20 foot area to an average five-foot depth;
- PAH-impacted AOC SB-36: excavation of approximately 122.5 tons within an approximate 23 by 30 foot area to an average two-foot depth;
- Metals-impacted (arsenic and lead) AOC SB-69: excavation of approximately 409 tons within an approximate 52 by 63 foot area to an average two-foot depth; and

- Asphalt pieces and fill AOC Column Pile Line M5: excavation of approximately 24 tons within an approximate 15 by 20 foot area.

A list of the industrial soil cleanup objectives (ISCOs) for the primary contaminants of concern (COCs) and applicable land use for this site is provided in Table 4.

A figure showing areas where excavation was performed is shown in Figure 5.

1.4.2 Site-Related Treatment Systems

No long-term treatment systems were installed as part of the site remedy, other than those described in Section 2.0 below.

1.4.3 Remaining Contamination

The 154 South Ogden Street Site was remediated to remove petroleum-, metals-, and PAH-impacted soil/fill and achieve Industrial Soil Cleanup Objectives (ISCOs) below a two-foot soil cover under a restricted-use (Track 4) cleanup. The achieved restricted-use cleanup is consistent with the intended use of the Site. Residual contamination remaining at the Site above Unrestricted SCOs and GWQSs/GVs, includes residual degraded petroleum, certain VOCs, SVOCs (primarily PAHs), and metals located from beneath the cover system demarcation layer, to the groundwater interface (approximately 12 to 19 fbgs). Constituents above regulatory guidelines are located site-wide, though potential exposure to the remaining contamination was mitigated due to the depth of the remaining contamination after the completion of the remedial excavation and the placement of a Site cover system, including the new building, concrete and asphalt covered areas, gravel, and vegetated soil cover areas.

Once the AOC excavations were deemed complete, backfilled, and graded, a demarcation layer consisting of an orange plastic mesh material was placed to identify material being left in-place across the entire Site. The new building excavation was backfilled with select clean backfill (i.e., 2" run-of-crush and structural stone), with areas outside of the new building and utility corridor, being backfilled with approved import material which met DER-10 requirements and as approved by the Department.

Concentrations of residual contaminants above Part 375 Unrestricted SCOs in on-Site soil/fill and above GWQS in groundwater are summarized in Tables 5 and 6, respectively.

2.0 ENGINEERING & INSTITUTIONAL CONTROL PLAN

2.1 Introduction

2.1.1 General

Since remaining contaminated soil and groundwater exists beneath the site, Engineering Controls and Institutional Controls (EC/ICs) are required to protect human health and the environment. This Engineering and Institutional Control Plan describes the procedures for the implementation and management of all EC/ICs at the site. The EC/IC Plan is one component of the SMP and is subject to revision by NYSDEC.

2.1.2 Purpose

This plan provides:

- A description of all EC/ICs on the site;
- The basic implementation and intended role of each EC/IC;
- A description of the key components of the ICs set forth in the Environmental Easement;
- A description of the features to be evaluated during each required inspection and periodic review;
- A description of plans and procedures to be followed for implementation of EC/ICs, such as the implementation of the Excavation Work Plan for the proper handling of remaining contamination that may be disturbed during maintenance or redevelopment work on the site; and
- Any other provisions necessary to identify or establish methods for implementing the EC/ICs required by the site remedy, as determined by the NYSDEC.

2.2 Engineering Controls

2.2.1 Engineering Control Systems

2.2.1.1 Soil Cover

Exposure to remaining contamination in soil/fill at the site is prevented by a soil cover system placed over the site. This cover system is comprised of a minimum of 24 inches of clean soil, asphalt pavement, concrete-covered sidewalks, and concrete building slabs. The Excavation Work Plan that appears in Appendix C 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. Procedures for the inspection and maintenance of this cover are provided in the Monitoring Plan included in Section 4.0 of this SMP.

2.2.1.2 Bioretention Basins

There are five bioretention basins located on the Site (see Figure 6). Each bioretention basin is part of the Site erosion control plan and each consists of a minimum 30-inch well-blended mixture of construction sand (50-60%), organic leaf compost (20-30%), and native topsoil (20-30%). Each basin has been completed with approximately 3-inches of shredded wood mulch followed by the planting of several emergent wetland species of plants. Procedures for the inspection and maintenance of these basins are provided in the Monitoring Plan included in Section 4.0 of this SMP.

2.2.2 Criteria for Completion of Remediation/Termination of Remedial Systems

Generally, remedial processes are considered completed when effectiveness monitoring indicates that the remedy has achieved the remedial action objectives identified by the decision document. The framework for determining when remedial processes are complete is provided in Section 6.6 of NYSDEC DER-10.

The composite cover system is a permanent control and the quality and integrity of this system will be inspected at defined, regular intervals in perpetuity.

2.3 Institutional Controls

A series of Institutional Controls is required by the Decision Document 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 restricted residential uses only. Adherence to these Institutional Controls on the site is required by the Environmental Easement and will be implemented under this Site Management Plan. These Institutional Controls are:

- Compliance with the Environmental Easement and this SMP by the Grantor and the Grantor's successors and assigns;
- All Engineering Controls must be operated and maintained as specified in this SMP;
- All Engineering Controls on the Controlled Property must be inspected at a frequency and in a manner defined in the SMP.
- Data and information pertinent to Site Management of the Controlled Property must be reported at the frequency and in a manner defined in this SMP;

Institutional Controls identified in the Environmental Easement may not be discontinued without an amendment to or extinguishment of the Environmental Easement.

The site has a series of Institutional Controls in the form of site restrictions. Adherence to these Institutional Controls is required by the Environmental Easement. Site restrictions that apply to the Controlled Property are:

- The property may only be used for restricted-residential, commercial, and industrial use provided that the long-term Engineering and Institutional Controls included in this SMP are employed.
- The property may not be used for a higher level of use, such as unrestricted use without additional remediation and amendment of the Environmental Easement, as approved by the NYSDEC;
- All future activities on the property that will disturb remaining contaminated material must be conducted in accordance with this SMP;
- The use of the groundwater underlying the property is prohibited without treatment rendering it safe for intended use;
- Vegetable gardens and farming on the property are prohibited;

- 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. NYSDEC retains the right to access such Controlled Property at any time in order to evaluate the continued maintenance of any and all controls. This certification shall be submitted annually, or an alternate period of time that NYSDEC may allow and will be made by an expert that the NYSDEC finds acceptable.

2.3.1 Excavation Work Plan

The site has been remediated for restricted-residential, commercial, and industrial use. Any future intrusive work that will penetrate the soil cover or 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 (EWP) that is attached as Appendix C to this SMP. Any work conducted pursuant to the EWP 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. A sample HASP is attached as Appendix D to this SMP that is in current compliance with DER-10, and 29 CFR 1910, 29 CFR 1926, and all other applicable Federal, State and local regulations. Based on future changes to State and federal health and safety requirements, and specific methods employed by future contractors, the HASP and CAMP will be updated and re-submitted with the notification provided in Section C-1 of the EWP. Any intrusive construction work will be performed in compliance with the EWP, HASP, and CAMP, and will be included in the periodic inspection and certification reports submitted under the Site Management Reporting Plan (see Section 4).

The site owner and associated parties preparing the remedial documents submitted to the State, and parties performing this work, are completely responsible for the safe performance of all intrusive work, the structural integrity of excavations, proper disposal of excavation de-water, control of runoff from open excavations into remaining contamination, and for structures that may be affected by excavations (such as building foundations and

bridge footings). The site owner will ensure that site development activities will not interfere with, or otherwise impair or compromise, the engineering controls described in this SMP.

2.4 Inspections and Notifications

2.4.1 Inspections

Inspections of all remedial components installed at the site will be conducted at the frequency specified in the SMP Monitoring Plan schedule. A comprehensive site-wide inspection will be conducted annually, regardless of the frequency of the Periodic Review Report. The inspections will determine and document the following:

- Whether Engineering Controls continue to perform as designed;
- If these controls continue to be protective of human health and the environment;
- Compliance with requirements of this SMP and the Environmental Easement;
- Achievement of remedial performance criteria;
- Sampling and analysis of appropriate media during monitoring events;
- If site records are complete and up to date; and
- Changes, or needed changes, to the remedial or monitoring system;

Inspections will be conducted in accordance with the procedures set forth in the Monitoring Plan of this SMP (Section 3.0). The reporting requirements are outlined in the Periodic Review Reporting section of this plan (Section 4.0).

If an emergency, such as a natural disaster or an unforeseen failure of any of the ECs occurs, an inspection of the site will be conducted within 5 days of the event to verify the effectiveness of the EC/ICs implemented at the site by a qualified environmental professional as determined by NYSDEC.

2.4.2 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 Brownfield Cleanup Agreement (BCA), 6NYCRR Part 375, and/or Environmental Conservation Law.
- 15-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 other Engineering Controls and likewise any action to be taken to mitigate the damage or defect.
- Notice within 48-hours of any emergency, such as a fire, flood, or earthquake that reduces or has the potential to reduce the effectiveness of Engineering Controls in place at the site, including 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 ECs.

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 Brownfield Cleanup Agreement (BCA) and all approved work plans and reports, including this 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.

2.5 Contingency Plan

Emergencies may include injury to personnel, fire or explosion, environmental release, or serious weather conditions.

2.5.1 Emergency Telephone Numbers

In the event of any environmentally related situation or unplanned occurrence requiring assistance the Owner or Owner's representative(s) should contact the appropriate party from the contact list below. For emergencies, appropriate emergency response personnel should be contacted. Prompt contact should also be made to the designated qualified environmental professional as determined by the owner. These emergency contact lists must be maintained in an easily accessible location at the site.

Table 2-1: Emergency Contact Numbers

Medical, Fire, and Police:	911
One Call Center:	(800) 272-4480 (3 day notice required for utility mark-out)
Poison Control Center:	(800) 222-1222
Pollution Toxic Chemical Oil Spills:	(800) 424-8802
NYSDEC Spills Hotline	(800) 457-7362

Table 2-2: Site Contact Numbers

South Buffalo Charter School	Jim Neimeier (716) 864-3863
Benchmark Environmental Engineering and Science, PLLC	(716) 856-0599

* Note: Contact numbers subject to change and should be updated as necessary

2.5.2 Map and Directions to Nearest Health Facility

Site Location: 154 South Ogden Street, Buffalo, New York 14210
Nearest Hospital Name: Mercy Hospital of Buffalo
Hospital Location: 565 Abbott Road, Buffalo, NY 14220
Hospital Telephone: (716) 826-7000

Directions to the Hospital (see Figure A in Appendix D):

1. Travel south along South Ogden Street (0.1 mile).

2. Turn right onto Mineral Springs Road (0.6 mile).
3. Turn left onto Seneca Street (0.5 mile).
4. Turn right onto Cazenovia Street (0.4 mile).
5. End at Mercy Hospital.

Total Distance: 1.7 miles from Site.
Total Estimated Time: Approximately 5 minutes.

Figure A (included in SMP Appendix D – HASP) presents a Hospital Route Map.

2.5.3 Response Procedures

As appropriate, the fire department and other emergency response group will be notified immediately by telephone of the emergency. The emergency telephone number list is found at the beginning of this Contingency Plan (Table 2-1). The list will also posted prominently at the site and made readily available to all personnel at all times.

3.0 SITE MONITORING PLAN

3.1 Introduction

3.1.1 General

The Monitoring Plan describes the measures for evaluating the performance and effectiveness of the remedy to reduce or mitigate contamination at the site, the soil cover system, and all affected site media identified below. Monitoring of other Engineering Controls is described in Chapter 4, Operation, Monitoring, and Maintenance Plan. This Monitoring Plan may only be revised with the approval of NYSDEC.

3.1.2 Purpose and Schedule

This Monitoring Plan describes the methods to be used for:

- Sampling and analysis of all appropriate media (e.g., groundwater, indoor air, soil vapor, soils);
- Assessing compliance with applicable NYSDEC standards, criteria and guidance, particularly ambient groundwater standards and Part 375 SCOs for soil;
- Assessing achievement of the remedial performance criteria.
- Evaluating site information periodically to confirm that the remedy continues to be effective in protecting public health and the environment; and
- Preparing the necessary reports for the various monitoring activities.

To adequately address these issues, this Monitoring Plan provides information on:

- Sampling locations, protocol, and frequency;
- Information on all designed monitoring systems (e.g., well logs);
- Analytical sampling program requirements;
- Reporting requirements;
- Quality Assurance/Quality Control (QA/QC) requirements;
- Inspection and maintenance requirements for monitoring wells;

- Monitoring well decommissioning procedures; and
- Annual inspection and periodic certification.

3.2 Soil Cover System Monitoring

Site-wide inspection of the composite cover system will be performed annually in association with the PRR, and will also be performed after all severe weather conditions that may affect the cover system. The site-wide inspection form is provided in Appendix E.

The site-wide inspection will include a general visual evaluation of all areas of the Site. Non-paved areas (e.g. vegetated areas), concrete and asphalt paved areas, and gravel/stone areas across the Site will be inspected for erosion, absence of vegetation, and condition of impermeable surfaces (i.e., asphalt and concrete) to verify that these areas are being maintained, as appropriate to prevent direct contact with remaining contamination and potential off-site migration of remaining contaminants by surface water run-off. Any surface or subsurface disturbances related to redevelopment activities will be performed in compliance with the Excavation Work Plan (Appendix C).

3.3 Media Monitoring Program

Environmental media sampling is not a requirement for the 154 South Ogden Street Site.

3.4 Site-Wide Inspection

Site-wide inspections will be performed on a regular schedule at a minimum of once a year. Site-wide inspections will also be performed after all severe weather conditions that may affect Engineering Controls or monitoring devices. During these inspections, an inspection form will be completed (Appendix E). The form will compile sufficient information to assess the following:

- Compliance with all ICs, including site usage;
- An evaluation of the condition and continued effectiveness of ECs;
- General site conditions at the time of the inspection;

- The site management activities being conducted including, where appropriate, confirmation sampling and a health and safety inspection;
- Compliance with permits and schedules included in the Operation and Maintenance Plan; and
- Confirm that site records are up to date.

3.5 Monitoring Reporting Requirements

Forms and any other information generated during regular monitoring events and inspections will be kept on file on-site. All forms, and other relevant reporting formats used during the monitoring/inspection events, will be (1) subject to approval by NYSDEC and (2) submitted at the time of the Periodic Review Report, as specified in the Reporting Plan of this SMP.

All monitoring results will be reported to NYSDEC on a periodic basis in the Periodic Review Report. The report will include, at a minimum:

- Date of event;
- Personnel conducting the Site visit;
- Description of the activities performed;
- Copies of all inspection forms; and
- Any observations, conclusions, or recommendations.

Data will be reported in digital format in accordance with the NYSDEC electronic data deliverable guidance. Site inspection and reporting (PRR) will be performed at least once per year.

4.0 INSPECTIONS, REPORTING & CERTIFICATIONS

4.1 Site Inspections

4.1.1 Inspection Frequency

All inspections will be conducted at the frequency specified in the schedules provided in Section 3 Monitoring Plan of this SMP. At a minimum, a site-wide inspection will be conducted annually.

4.1.2 Inspection Forms, Sampling Data, & Maintenance Reports

A NYSDEC Institutional and Engineering Control Certification Form will be completed during the annual Site-wide inspection (see Appendix F). These forms are auto-generated by the NYSDEC. The Site cover system inspection form is provided in Appendix E.

All applicable inspection forms and other records generated for the site during the reporting period will be provided in electronic format in the Periodic Review Report.

4.1.3 Evaluation of Records & Reporting

The results of the inspection and site monitoring data will be evaluated as part of the EC/IC certification to confirm that the:

- EC/ICs are in place, are performing properly, and remain effective;
- The Monitoring Plan is being implemented;
- The site remedy continues to be protective of public health and the environment and is performing as designed in the RAWP and FER.

4.2 Certification of Engineering and Institutional Controls

After the last inspection of the reporting period, a qualified environmental professional will prepare the following certification:

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;*
- *If a financial assurance mechanism is required under the oversight document for the site, the mechanism remains valid and sufficient for the intended purpose under the document;*
- *Use of the site is compliant with the environmental easement;*
- *The engineering control systems are performing as designed and are 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*
- *The information presented in this report is accurate and complete.*
- *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, [name], of [business address], am certifying as [Owner or Owner's Designated Site Representative] for the site.*

The signed certification will be included in the Periodic Review Report described below.

4.3 Periodic Review Report

A Periodic Review Report will be submitted to the Department every year, beginning eighteen months after the Certificate of Completion is issued. In the event that the site is subdivided into separate parcels with different ownership, a single Periodic Review Report will be prepared that addresses the site described in Appendix A (Metes and Bounds). The report will be prepared in accordance with NYSDEC DER-10 and submitted within 45 days of the end of each certification period. The report will include:

- Identification, assessment and certification of all ECs/ICs required by the remedy for the site;
- Results of the required annual site inspections and severe condition inspections, if applicable;
- All applicable inspection forms and other records generated for the site during the reporting period in electronic format;
- A summary of any discharge monitoring data and/or information generated during the reporting period with comments and conclusions;
- A site evaluation, which includes the following:
    - The compliance of the remedy with the requirements of the site-specific Decision Document;
    - The operation and the effectiveness of all treatment units, etc., including identification of any needed repairs or modifications;
    - Recommendations regarding any necessary changes to the remedy and/or Monitoring Plan; and
    - The overall performance and effectiveness of the remedy.

The Periodic Review Report will be submitted, in electronic format, to the NYSDEC Central Office and Regional Office in which the site is located, and in electronic format to NYSDEC Central Office, Regional Office, and the NYSDOH Bureau of Environmental Exposure Investigation.

4.4 Corrective Measures Plan

If any component of the remedy is found to have failed, or if the periodic certification cannot be provided due to the failure of an institutional or engineering control, a corrective measures plan will be submitted to the NYSDEC for approval. This plan will explain the failure and provide the details and schedule for performing work necessary to correct the failure. Unless an emergency condition exists, no work will be performed pursuant to the corrective measures plan until it is approved by the NYSDEC.

5.0 REFERENCES

1. LCS, Inc. *Citizens Preliminary Environmental Site Assessment, Undeveloped/Vacant/Wooded/Fallow Land, 154 South Ogden Street, Buffalo, New York*. July 2011.
2. EmpireGeo Services, Inc. *Report of Environmental Test Pit Investigation, Proposed Charter School, 154 South Ogden Street, Buffalo, New York*. December 2011.
3. Benchmark Environmental Engineering and Science, PLLC. *Supplemental Phase II Site Investigation Report, 154 South Ogden Street Site, Buffalo, New York*. March 2012.
4. EmpireGeo Services, Inc. *Geotechnical Evaluation for Proposed South Buffalo Charter School, South Ogden Street, Buffalo, New York*. May 22, 2012.

TABLES

TABLE 1A

PRE-REMEDIAL SOIL/FILL CONTAMINATION SUMMARY
REMEDIAL INVESTIGATION

Site Management Plan
154 South Ogden Street Site
Buffalo, New York

Compound [1]	CasNum	ISCO [2]	Units	Sample Location, Collection Date, and Laboratory Qualifier																											
				SB-17 (6-8) BLIND DUP #1 1/4/2013	Qual	SS-2 (0-0.5) BLIND DUP #2 1/10/2013	Qual	SB-38 (10-12) BLIND DUP #3 1/11/2013	Qual	SB-9 (4-6) 1/16/2013	Qual	SB-10 (6-8) 1/3/2013	Qual	SB-11 (8-10) 1/15/2013	Qual	SB-12 (10-12) 1/15/2013	Qual	SB-13 (4-5.8) 1/3/2013	Qual	SB-14 (0-2) 1/3/2013	Qual	SB-14 (8-10) 1/3/2013	Qual	SB-15 (0-2) 1/16/2013	Qual	SB-15 (2-4) 1/16/2013	Qual	SB-16 (6-8) 1/4/2013	Qual	SB-17 (0-2) 1/4/2013	Qual	SB-17 (6-8) 1/4/2013	Qual
General Chemistry																															
Solids, Total	NONE	--	%	86		76		65		83		84		77		87		81		89		52		83		81		79		84		87	
Volatile Organics by 8260C/5035																															
Acetone	67-64-1	1000	mg/kg	0.0099	U	-		0.026	U	0.01	U	0.011	U	0.038	J	0.06		0.017	U	0.017	U	0.21		0.018	U	0.016	U	0.026	J	0.013	U	0.011	UJ
2-Butanone	78-93-3	1000	mg/kg	0.0099	U	-		0.02	J	0.01	U	0.011	U	0.032	U	0.014		0.017	U	0.017	U	0.03		0.018	U	0.016	U	0.013	UJ	0.013	U	0.011	UJ
Carbon Disulfide	75-15-0	--	mg/kg	0.099	U	-		0.026	U	0.01	U	0.011	U	0.032	U	0.012	U	0.017	U	0.017	U	0.03	U	0.018	U	0.016	U	0.013	U	0.013	U	0.011	U
Cyclohexane	110-82-7	--	mg/kg	0.02	U	-		0.051	U	0.02	U	0.022	U	0.065	U	0.025	U	0.00043	J	0.033	U	0.014	J	0.036	U	0.032	U	0.025	U	0.026	U	0.022	U
Ethylbenzene	100-41-4	780	mg/kg	0.0099	U	-		0.0026	U	0.001	U	0.0011	U	0.0032	U	0.0012	U	0.0017	U	0.0017	U	0.003	U	0.0018	U	0.0016	U	0.0013	U	0.0013	U	0.0011	U
p-Isopropyltoluene	99-87-6	--	mg/kg	0.00099	U	-		0.0026	U	0.001	U	0.0011	U	0.0032	U	0.0012	U	0.0017	U	0.0017	U	0.48		0.0018	U	0.0016	U	0.088		0.0013	U	0.0011	U
Methyl cyclohexane	108-87-2	--	mg/kg	0.004	U	-		0.01	U	0.004	U	0.0043	U	0.013	U	0.005	U	0.0067	U	0.0067	U	0.024		0.0073	U	0.0065	U	0.0051	U	0.0052	U	0.0044	U
Methylene chloride	75-09-2	1000	mg/kg	0.0099	U	-		0.026	U	0.01	U	0.011	U	0.032	U	0.0034	J	0.017	U	0.017	U	0.03	U	0.018	U	0.016	U	0.013	U	0.013	U	0.011	U
Toluene	108-88-3	1000	mg/kg	0.0015	U	-		0.0038	U	0.0015	U	0.0011	U	0.0049	U	0.0019	U	0.0025	U	0.0025	U	0.0042		0.0027	U	0.0024	U	0.0019	U	0.002	U	0.0016	U
Semivolatile Organics by 8270D																															
2-Methylnaphthalene	91-57-6	--	mg/kg	0.23	U	0.26	U	0.6	U	0.2	J	1.2	U	0.26	U	0.22	U	0.24	U	0.44	U	3.8	U	0.24	U	0.1	J	3		0.22	J	0.22	U
3-Methylphenol/4-Methylphenol	108-39-4 / 106-44-5	1000	mg/kg	0.27	U	0.31	U	0.72	U	0.29	U	1.4	U	0.31	U	0.27	U	0.29	U	0.53	U	4.5	U	0.28	U	0.29	U	3	U	0.56	U	0.27	U
Acenaphthene	83-32-9	1000	mg/kg	0.046	J	0.17	U	0.4	U	0.67		0.77	U	0.17	U	0.13	J	0.16	U	0.29	U	2.5	U	0.16	U	0.16	U	12		0.62	J	0.15	U
Acenaphthylene	208-96-8	1000	mg/kg	0.16	J	0.17	U	0.66		0.23		0.77	U	0.17	U	0.15	U	0.16	U	0.29	U	1.3	J	0.16	U	0.16	U	2		0.31	UJ	0.15	U
Anthracene	120-12-7	1000	mg/kg	0.22	J	0.13	U	0.37		2		0.41	J	0.086	J	0.26		0.12	U	0.06	J	2.8		0.12	U	0.068	J	28		1.1	J	0.11	U
Benzo(a)anthracene	56-55-3	11	mg/kg	0.65	J	0.13	U	0.49	J	3.2		1.2		0.22		0.55		0.057	J	0.18	J	7		0.12	U	0.25	NJ	47		3.1	J	0.11	UJ
Benzo(a)pyrene	50-32-8	1.1	mg/kg	0.58	J	0.17	U	1.4	J	2.8		1.2		0.15	J	0.5		0.051	J	0.18	J	6.4		0.16	U	0.22		41		2.9	J	0.15	UJ
Benzo(b)fluoranthene	205-99-2	11	mg/kg	0.87	J	0.13	U	1.2	J	3.9		1.6		0.24		0.65		0.061	J	0.22		8.1		0.12	U	0.35		53		4.2	J	0.11	UJ
Benzo(ghi)perylene	191-24-2	1000	mg/kg	0.33	J	0.17	U	0.84	J	1.6		0.65	J	0.11	J	0.33		0.16	U	0.1	J	3.8		0.16	U	0.18		20		1.6	J	0.15	U
Benzo(k)fluoranthene	207-08-9	110	mg/kg	0.32	J	0.13	U	0.36	J	1.2		0.49	J	0.088	J	0.24		0.034	J	0.1	J	3.6		0.12	U	0.15		19		1.5	J	0.11	U
Benzoic Acid	65-85-0	--	mg/kg	0.61	U	0.7	U	1.6	U	0.64	U	3.1	U	0.7	U	0.6	U	0.66	U	1.2	U	10	U	0.64	U	0.66	U	6.6	U	1.2	U	0.6	U
Benzyl Alcohol	100-51-6	--	mg/kg	0.19	U	0.21	U	0.5	U	0.2	U	0.97	U	0.22	U	0.19	U	0.2	U	0.36	U	3.1	U	0.2	U	0.2	U	2	U	0.39	U	0.18	U
Bis(2-Ethylhexyl)phthalate	117-81-7	--	mg/kg	0.19	U	0.21	U	0.5	U	0.2	U	0.97	U	0.22	U	0.19	U	0.2	U	0.36	U	3.1	U	0.2	U	0.2	U	2	U	0.39	U	0.18	U
Butyl benzyl phthalate	85-68-7	--	mg/kg	0.19	U	0.21	U	0.5	U	0.2	U	0.97	U	0.22	U	0.19	U	0.2	U	0.36	U	3.1	U	0.2	U	0.2	U	2	U	0.39	U	0.18	U
Carbazole	86-74-8	--	mg/kg	0.079	J	0.21	U	0.19	J	0.78		0.18	J	0.052	J	0.16	J	0.2	U	0.36	U	1.4	J	0.2	U	0.047	J	11		1.1	J	0.18	U
Chrysene	218-01-9	110	mg/kg	0.65	J	0.13	U	0.7	J	3		1.1		0.21		0.55		0.055	J	0.17	J	6.6		0.12	U	0.3		45		3.5	J	0.11	UJ
Di-n-butylphthalate	84-74-2	--	mg/kg	0.19	U	0.21	U	0.5	U	0.2	U	0.97	U	0.22	U	0.19	U	0.2	U	0.36	U	3.1	U	0.2	U	0.2	U	2	U	0.39	U	0.18	U
Dibenzo(a,h)anthracene	53-70-3	1.1	mg/kg	0.097	J	0.13	U	0.29	NJ	0.37		0.58	U	0.13	U	0.067	J	0.12	U	0.22	U	0.97	J	0.12	U	0.041	J	6.2		0.44	J	0.11	U
Dibenzofuran	132-64-9	1000	mg/kg	0.063	J	0.21	U	0.5	U	0.62		0.97	U	0.22	U	0.081	J	0.2	U	0.36	U	0.71	J	0.2	U	0.048	J	8.4		0.53	J	0.18	U
Fluoranthene	206-44-0	1000	mg/kg	1.2	J	0.13	U	0.75	J	8.6	D	2.7		0.48		1.5		0.12		0.36		15		0.12	U	0.58		100	D	10	J	0.11	UJ
Fluorene	86-73-7	1000	mg/kg	0.072	J	0.21	U	0.5	U	1		0.97	U	0.047	J	0.16	J	0.2	U	0.36	U	1	J	0.2	U	0.2	U	15		0.76	J	0.18	U
Hexachlorobenzene	118-74-1	1.2	mg/kg	0.11	U	0.13	U	0.3	U	0.12	U	0.58	U	0.13	U	0.11	U	0.12	U	0.22	U	1.9	U	0.12	U	0.12	U	1.2	U	0.23	U	0.11	U
Indeno(1,2,3-cd)Pyrene	193-39-5	11	mg/kg	0.41	J	0.17	U	0.73		1.9		0.64	J	0.11	J	0.32		0.16	U	0.096	J	3.4		0.16	U	0.2		25		2.1	J	0.15	U
Naphthalene	91-20-3	1000	mg/kg	0.081	J	0.21	U	0.5	U	0.31		0.97	U	0.22	U	0.091	J	0.2	U	0.36	U	3.1	U	0.2	U	0.089	J	6.4		0.34	J	0.18	U
Phenanthrene	85-01-8	1000	mg/kg	0.6	J	0.13	U	0.53	J	7.4		1.6		0.4		1.3		0.09	J	0.2	J	11		0.12	U	0.38		92	D	7.5	J	0.11	UJ
Phenol	108-95-2	1000	mg/kg	0.19	U	0.21	U	0.5	U	0.2	U	0.97	U	0.22	U	0.19	U	0.2	U	0.36	U	3.1	U	0.2	U	0.2	U	2	U	0.39	U	0.18	U
Pyrene	129-00-0	1000	mg/kg	0.92	J	0.13	U	0.8	J	7		2.2		0.38		1.2		0.098	J	0.28		12		0.12	U	0.44		80		7.4	J	0.11	UJ
Total PAHs (CP-51) [3]		**500**	**mg/kg**	**7.396**	**J**	**ND**		**9.62**		**45.38**		**14.76**		**2.741**		**8.038**		**0.766**		**2.306**		**86.07**		**ND**		**3.448**		**593.6**		**47.45**		**ND**	
Organochlorine Pesticides by 8081B																															
4,4'-DDD	72-54-8	180	mg/kg	0.00177	UJ	0.00203	UJ	0.0327	J	0.00187	UJ	0.00226	J	0.00655	UJ	0.00971	J	0.00267	J	0.00178	UJ	1.73	J	0.00184	UJ	0.00186	UJ	0.0195	UJ	0.00181	UJ	0.00177	UJ
4,4'-DDE	72-55-9	120	mg/kg	0.00281	UJ	0.00361	J	0.0482	U	0.00187	UJ	0.00411		0.00988	UJ	0.009	UJ	0.00185	UJ	0.00374	NJ	0.213	J	0.000797	J	0.00327	J	0.0195	UJ	0.0045	NJ	0.00177	UJ
4,4'-DDT	50-29-3	94	mg/kg	0.00819	J	0.00242	J	0.0422	J	0.00351	UJ	0.0103	J	0.0185	UJ	0.00858	J	0.00247	J	0.0098	NJ	1.98	J	0.00345	UJ	0.00315	UJ	0.0366	UJ	0.0111	J	0.00331	UJ
Alpha-BHC	319-84-6	6.8	mg/kg	0.000739	UJ	0.000844	UJ	0.0201	U	0.00078	UJ	0.000772	UJ	0.00412	UJ	0.00375	UJ	0.000771	UJ	0.000744	UJ	0.00126	UJ	0.000766	UJ	0.000776	UJ	0.00814	UJ	0.000753	UJ	0.000736	UJ
Chlordane	57-74-9	--	mg/kg	0.0311	J	0.0165	UJ	0.392	U	0.0152	UJ	0.0151	UJ	0.0803	UJ	0.0731	UJ	0.015	UJ	0.0164	UJ	2.12	J	0.0149	UJ	0.0151	UJ	0.159	UJ	0.0504	J	0.0144	UJ
cis-Chlordane	5103-71-9	47	mg/kg	0.00206	UJ	0.00253	UJ	0.0602	U	0.00234	UJ	0.00232	UJ	0.0124	UJ	0.0112	UJ	0.000771	NJ	0.00208	UJ	0.112	J	0.0023	UJ	0.00233	UJ	0.0244	UJ	0.00308	UJ	0.00221	UJ
Dieldrin	60-57-1	2.8	mg/kg	0.00111	UJ	0.00127	UJ	0.0301	U	0.00117	UJ	0.00116	UJ	0.00618	UJ	0.00562	UJ	0.00116	UJ	0.00112	UJ	0.0509	NJ	0.00115	UJ	0.00116	UJ	0.0122	UJ	0.00113	UJ	0.0011	UJ
Endrin ketone	53494-70-5	--	mg/kg	0.00177	UJ	0.00203	UJ	0.0482	UJ	0.00187	UJ	0.00185	UJ	0.00988	UJ	0.009	UJ	0.00185	UJ	0.00178	UJ	0.00303	UJ	0.00184	UJ	0.00186	UJ	0.0195	UJ	0.00181	UJ	0.00177	UJ
Heptachlor	76-44-8	29	mg/kg	0.000886	UJ	0.00101	UJ	0.0241	U	0.000936	UJ	0.000927	UJ	0.00494	UJ	0.0045	UJ	0.000925	UJ	0.000893	UJ	0.00152	UJ	0.00092	UJ	0.000932	UJ	0.00977	UJ	0.000904	UJ	0.000884	UJ
Lindane	58-89-9	23	mg/kg	0.000739	UJ	0.000844	UJ	0.0827	J	0.00078	UJ	0.000772	UJ	0.00412	UJ	0.00375	UJ	0.000771	UJ	0.000744	UJ	0.00126	UJ	0.000766	UJ	0.000776	UJ	0.00814	UJ	0.000753	UJ	0.000736	UJ
Methoxychlor	72-43-5	--	mg/kg	0.00332	UJ	0.0038	UJ	0.0904	UJ	0.00351	UJ	0.00348	UJ	0.0185	UJ	0.0169	UJ	0.00347	UJ	0.00335	UJ	0.00569	UJ	0.00345	UJ	0.00349	UJ	0.0366	UJ	0.00339	UJ	0.00331	UJ
trans-Chlordane	5103-74-2	--	mg/kg	0.00222	UJ	0.00253	UJ	0.0602	U	0.00234	UJ	0.00232	UJ	0.0124	UJ	0.0112	UJ	0.00231	UJ	0.00134	UJ	0.0563	J	0.0023	UJ	0.00233	UJ	0.0244	UJ	0.00586	J	0.00221	UJ
Polychlorinated Biphenyls by 8082A																															
Aroclor 1254	11097-69-1	25	mg/kg	0.0378	UJ	0.0421	UJ	0.049	U	0.0125	J	0.0386	UJ	0.0421	UJ	0.037	UJ	0.0397	UJ	0.0359	UJ	0.0616	UJ	0.0391	UJ	0.0397	UJ	0.0594	J	0.0372	UJ	0.0362	UJ
Aroclor 1260	11096-82-5	25	mg/kg	0.0181	J	0.0421	UJ	0.0451	J	0.0398	UJ	0.0386	UJ	0.0421	UJ	0.037	UJ	0.0397	UJ	0.0359	UJ	0.0616	UJ	0.0391	UJ	0.025	J	0.0252	J	0.0161	J	0.0362	UJ
Total Metals by 6010C/7471B (Mercury)																															
Aluminum, Total	7429-90-5	--	mg/kg	14000		11000	J	13000		8500		8900		11000		7200		13000		9000		5300		7900		14000		11000		14000		6200	
Antimony, Total	7440-36-0	--	mg/kg	5.4	J	4.2	J	4.3	J	18	J	3.9	J	3.3	J	2.1	J	3.4	J	3.1	J	9.4	J	1.6	J	4.1	J	15	J	4.5	J	1.9	J
Arsenic, Total	7440-38-2	16	mg/kg	12		7.6	J	7.7		7.6	J	7.2		7.2		3.8		8		7.6		12		4.5	J	11	J	9.2		8.7		3	
Barium, Total	7440-39-3	10000	mg/kg	92		76	J	130	J	94		89		77		50		78		66		870		47		110		390		91		43	
Beryllium, Total	7440-41-7	2700	mg/kg	0.71		0.6		0.63		0.42	J	0.48		0.56		0.36	J	0.65		0.52		0.41	J	0.37	J	0.67		0.52		0.7		0.31	J
Cadmium, Total	7440-43-9	60	mg/kg	0.14	J	1	U	0.63	J	0.55	J	0.71	J	0.19	J	0.09	J	0.97	U	0.84	U	3.5		0.18	J	0.11	J	1.3		0.12	J	0.89	U
Calcium, Total	7440-70-2	--	mg/kg	51000		32000	J	20000		18000		15000		16000		5200		38000		67000		86000		48000		36000		45000		57000		3400	
Chromium, Total	7440-47-3	--	mg/kg	24	J	17	J	47	J	14		18	J	19	J	9.8	J	19	J	15	J	51	J	10		23		25	J	30	J	9.6	J
Cobalt, Total	7440-48-4	--	mg/kg	10		8		10		7.4		8.2		9.7		5.8		11		7.2		7.2		6.5		12		6.1		9.2		5.4	
Copper, Total	7440-50-8	10000	mg/kg	48	J	22	J	50		33		57	J	30		17		27	J	23	J	120	J	18		74		150	J	41	J	15	J
Iron, Total	7439-89-6	--	mg/kg	28000		21000	J	24000		17000		22000		22000		13000		24000		18000		22000		14000		30000		19000		28000		12000	
Lead, Total	7439-92-1	3900	mg/kg	97	J	17	J	220	J	840	J	220	J	50	J	22	J	53	J	45	J	3700	J	13	J	120	J	480	J	73	J	10	J
Magnesium, Total	7439-95-4	--	mg/kg	13000		7800		8500	J	6300		6400		7900		3200		13000		16000		7800		5500		15000		6800		13000		2600	
Manganese, Total	7439-96-5	10000	mg/kg	460		280		340		300	J	430		310		240		440		420		620		240	J	510	J	320		680		240	
Mercury, Total	7439-97-6	5.7	mg/kg	0.48		0.03	J	0.47		0.23		0.14		0.19	J	0.02	J	0.09	J	0.05	J	0.51		0.04	J	0.08		3.3		0.28		0.04	J
Nickel, Total	7440-02-0	10000	mg/kg	27		22	J	33		22		24		26		16		27		20		20		18		34		19		26		15	
Potassium, Total	7440-09-7	--	mg/kg	3000	J	2000	J	1700		990		1100	J	1800		900		2300	J	1400	J	870	J	1100		2400		1200	J	2600	J	700	J
Selenium, Total	7782-49-2	6800	mg/kg	2.3		0.79	J	1.2	J	1.4	J	1.3	J	0.84	J	0.66	J	0.94	J	1.3	J	2.8	J	0.28	J	2.2		2.4		2.5		1.1	J
Silver, Total	7440-22-4	6800	mg/kg	0.27	J	0.23	J	0.46	J	0.91	U	0.9	U	0.99	U	0.88	U	0.97	U	0.84	U	1	J	0.92	U	0.94	U	1		0.19	J	0.89	U
Sodium, Total	7440-23-5	--	mg/kg	310		220		200	J	280		170	J	150	J	240		680		260		540		120	J	360		320		380		110	J
Vanadium, Total	7440-62-2	--	mg/kg	28		22	J	24		17		19		21		14		24		19		20		14		25		25		29		13	
Zinc, Total	7440-66-6	10000	mg/kg	120		69	J	210		190	J	470		120	J	56	J	84		87		1400		61	J	190	J	320		110		45	

BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC

TABLE 1A

PRE-REMEDIAL SOIL/FILL CONTAMINATION SUMMARY
REMEDIAL INVESTIGATION

Site Management Plan
154 South Ogden Street Site
Buffalo, New York

Compound [1]	CasNum	ISCO [2]	Units	Sample Location, Collection Date, and Laboratory Qualifier																									
				SB-18 (2-4) 1/15/2013	Qual	SB-19 (0-2) 1/15/2013	Qual	SB-19 (8-10) 1/15/2013	Qual	SB-20 (2-4) 1/14/2013	Qual	SB-21 (2-4) 1/7/2013	Qual	SB-22 (2-4) 1/7/2013	Qual	SB-23 (0-2) 1/4/2013	Qual	SB-23 (4-6) 1/4/2013	Qual	SB-24 (0-2) 1/16/2013	Qual	SB-24 (2-4) 1/16/2013	Qual	SB-25 (10-12') 1/8/2013	Qual	SB-26 (6-8) 1/7/2013	Qual	SB-27 (0-2) 1/7/2013	Qual	SB-27 (3-4) 1/7/2013	Qual	SB-28 (2-4) 1/14/2013	Qual
General Chemistry																													
Solids, Total	NONE	--	%	85		89		89		80		80		81		74		82		85		83		74		90		70		68		83	
Volatile Organics by 8260C/5035																													
Acetone	67-64-1	1000	mg/kg	0.015	U	0.014	U	0.02	J	0.018	U	0.024	U	0.019	U	0.012	UJ	0.0049	J	0.0066	J	0.012	U	0.014		0.0088	U	0.015	J	0.052	U	0.012	U
2-Butanone	78-93-3	1000	mg/kg	0.015	U	0.014	U	0.018	U	0.018	U	0.024	U	0.019	U	0.012	UJ	0.014	UJ	0.015	U	0.012	U	0.013	U	0.0088	U	0.037	U	0.052	U	0.012	U
Carbon Disulfide	75-15-0	--	mg/kg	0.015	U	0.014	U	0.018	U	0.018	U	0.024	U	0.019	U	0.012	U	0.014	U	0.015	U	0.012	U	0.013	U	0.008	U	0.037	U	0.052	U	0.012	U
Cyclohexane	110-82-7	--	mg/kg	0.00074	J	0.027	U	0.0003	J	0.037	U	0.048	U	0.038	U	0.024	U	0.027	U	0.0014	J	0.00057	J	0.026	U	0.018	U	0.074	U	0.1	U	0.025	U
Ethylbenzene	100-41-4	780	mg/kg	0.0015	U	0.0014	U	0.0018	U	0.0018	U	0.0024	U	0.0019	U	0.0012	U	0.0014	U	0.0015	U	0.0012	U	0.0013	U	0.0088	U	0.0037	U	0.0052	U	0.0012	U
p-Isopropyltoluene	99-87-6	--	mg/kg	0.0015	U	0.0014	U	0.0018	U	0.0018	U	0.0024	U	0.0019	U	0.0012	U	0.0014	U	0.0015	U	0.0012	U	0.0019		0.00088	U	0.0037	U	0.0052	U	0.0012	U
Methyl cyclohexane	108-87-2	--	mg/kg	0.001	J	0.0055	U	0.0072	U	0.0074	U	0.0096	U	0.0077	U	0.0048	U	0.0054	U	0.002	J	0.00084	J	0.0053	U	0.0035	U	0.015	U	0.021	U	0.005	U
Methylene chloride	75-09-2	1000	mg/kg	0.015	U	0.0042	J	0.0058	J	0.018	U	0.024	U	0.019	U	0.012	U	0.014	U	0.015	U	0.012	U	0.013	U	0.0088	U	0.037	U	0.052	U	0.012	U
Toluene	108-88-3	1000	mg/kg	0.0023	U	0.002	U	0.0018	J	0.0019	U	0.0036	U	0.0029	U	0.0018	U	0.002	U	0.0023	U	0.0018	U	0.0013	U	0.0013	U	0.0055	U	0.0079	U	0.0019	U
Semivolatile Organics by 8270D																													
2-Methylnaphthalene	91-57-6	--	mg/kg	0.23	U	1.1	U	6.7	U	2.5	U	0.25	U	0.24	U	2.7	U	4.8	U	0.23	U	0.24	U	6.6	U	0.22	U	0.28	U	0.29	U	0.24	U
3-Methylphenol/4-Methylphenol	108-39-4 / 106-44-5	1000	mg/kg	0.28	U	1.3	U	8	U	3	U	0.3	U	0.29	U	3.2	U	5.8	U	0.28	U	0.28	U	7.9	U	0.26	U	0.33	U	0.35	U	0.29	U
Acenaphthene	83-32-9	1000	mg/kg	0.15	U	1.1		4.4	U	1.1	J	0.16	U	0.16	U	1.8	U	3.2	U	0.16	U	0.16	U	4.4	U	0.14	U	0.19	U	0.19	U	0.16	U
Acenaphthylene	208-96-8	1000	mg/kg	0.15	U	0.74	U	4.4	U	1.6	U	0.16	U	0.16	U	1.8	U	1.1	J	0.16	U	0.16	U	4.7		0.14	U	0.19	U	0.19	U	0.16	U
Anthracene	120-12-7	1000	mg/kg	0.11	U	2.3		3	J	3		0.12	U	0.12	U	1.3	U	3.3		0.12	U	0.12	U	6.7		0.11	U	0.14	U	0.14	U	0.12	U
Benzo(a)anthracene	56-55-3	11	mg/kg	0.11	U	3.5		10		6.1		0.12	U	0.12	U	1.3	U	8.1		0.12	U	0.12	U	25		0.11	U	0.14	U	0.14	U	0.12	U
Benzo(a)pyrene	50-32-8	1.1	mg/kg	0.15	U	2.8		9.5		5		0.16	U	0.16	U	1.8	U	7		0.16	U	0.16	U	23		0.14	U	0.19	U	0.19	U	0.16	U
Benzo(b)fluoranthene	205-99-2	11	mg/kg	0.041	J	3.6		12		6.4		0.045	J	0.12	U	1.3	U	8		0.061	J	0.12	U	30		0.11	U	0.14	U	0.14	U	0.12	U
Benzo(ghi)perylene	191-24-2	1000	mg/kg	0.15	U	1.5		6		2.7		0.16	U	0.16	U	1.8	U	4		0.16	U	0.16	U	15		0.14	U	0.19	U	0.19	U	0.16	U
Benzo(k)fluoranthene	207-08-9	110	mg/kg	0.11	U	1.5		4.6		2.8		0.12	U	0.12	U	1.3	U	3.5		0.12	U	0.12	U	13		0.11	U	0.14	U	0.14	U	0.12	U
Benzoic Acid	65-85-0	--	mg/kg	0.62	U	3	U	18	U	6.7	U	0.66	U	0.65	U	7.2	U	13	U	0.63	U	0.63	U	18	U	0.59	U	0.75	U	0.78	U	0.65	U
Benzyl Alcohol	100-51-6	--	mg/kg	0.19	U	0.92	U	5.6	U	2.1	U	0.2	U	0.2	U	2.2	U	4	U	0.19	U	0.2	U	5.5	U	0.18	U	0.23	U	0.24	U	0.2	U
Bis(2-Ethylhexyl)phthalate	117-81-7	--	mg/kg	0.19	U	0.92	U	5.6	U	2.1	U	0.2	U	0.2	U	2.2	U	4	U	0.19	U	0.2	U	5.5	U	0.18	U	0.23	U	0.24	U	0.2	U
Butyl benzyl phthalate	85-68-7	--	mg/kg	0.19	U	0.92	U	5.6	U	2.1	U	0.2	U	0.2	U	2.2	U	4	U	0.19	U	0.2	U	5.5	U	0.18	U	0.23	U	0.24	U	0.2	U
Carbazole	86-74-8	--	mg/kg	0.19	U	1.2		5.6	U	1.3	J	0.2	U	0.2	U	2.2	U	0.79	J	0.19	U	0.2	U	1.6	J	0.18	U	0.23	U	0.24	U	0.2	U
Chrysene	218-01-9	110	mg/kg	0.039	J	3.2		10		5.7		0.043	J	0.12	U	1.3	U	8		0.049	J	0.12	U	26		0.11	U	0.14	U	0.14	U	0.12	U
Di-n-butylphthalate	84-74-2	--	mg/kg	0.19	U	0.92	U	5.6	U	2.1	U	0.2	U	0.2	U	2.2	U	4	U	0.19	U	0.2	U	5.5	U	0.18	U	0.098	J	0.24	U	0.2	U
Dibenzo(a,h)anthracene	53-70-3	1.1	mg/kg	0.11	U	0.39	J	1.5	J	0.81	J	0.12	U	0.12	U	1.3	U	1.1	J	0.12	U	0.12	U	4.3		0.11	U	0.14	U	0.14	U	0.12	U
Dibenzofuran	132-64-9	1000	mg/kg	0.19	U	0.84	J	5.6	U	0.64	J	0.2	U	0.2	U	2.2	U	4	U	0.19	U	0.2	U	5.5	U	0.18	U	0.23	U	0.24	U	0.2	U
Fluoranthene	206-44-0	1000	mg/kg	0.054	J	7.5		22		13		0.061	J	0.12	U	0.53	J	15		0.058	J	0.043	J	42		0.11	U	0.06	J	0.061	J	0.12	U
Fluorene	86-73-7	1000	mg/kg	0.19	U	1.3		1.1	J	1.2	J	0.2	U	0.2	U	2.2	U	0.98	J	0.19	U	0.2	U	5.5	U	0.18	U	0.23	U	0.24	U	0.2	U
Hexachlorobenzene	118-74-1	1.2	mg/kg	0.11	U	0.55	U	3.3	U	1.2	U	0.12	U	0.12	U	1.3	U	2.4	U	0.12	U	0.12	U	3.3	U	0.11	U	0.14	U	0.14	U	0.12	U
Indeno(1,2,3-cd)Pyrene	193-39-5	11	mg/kg	0.15	U	1.7		6		2.5		0.16	U	0.16	U	1.8	U	4.6		0.16	U	0.16	U	13		0.14	U	0.19	U	0.19	U	0.16	U
Naphthalene	91-20-3	1000	mg/kg	0.19	U	0.48	J	5.6	U	2.1	U	0.2	U	0.2	U	2.2	U	4	U	0.19	U	0.2	U	5.5	U	0.18	U	0.23	U	0.12	J	0.2	U
Phenanthrene	85-01-8	1000	mg/kg	0.041	J	8		12		10		0.12	U	0.12	U	0.4	J	10		0.048	J	0.12	U	15		0.11	U	0.14	U	0.068	J	0.12	U
Phenol	108-95-2	1000	mg/kg	0.19	U	0.92	U	5.6	U	2.1	U	0.2	U	0.2	U	2.2	U	4	U	0.19	U	0.2	U	5.5	U	0.18	U	0.23	U	0.24	U	0.2	U
Pyrene	129-00-0	1000	mg/kg	0.041	J	5.4		19		10		0.049	J	0.12	U	0.44	J	12		0.049	J	0.035	J	38		0.11	U	0.054	J	0.05	J	0.12	U
Total PAHs (CP-51) [3]		**500**	**mg/kg**	**0.406**		**45.19**		**122.3**		**72.41**		**0.198**		**ND**		**3.57**		**90.68**		**0.455**		**0.078**		**261.2**		**ND**		**0.114**		**0.539**		**ND**	
Organochlorine Pesticides by 8081B																													
4,4'-DDD	72-54-8	180	mg/kg	0.00901	UJ	0.00176	UJ	0.0228	NJ	0.00232	J	0.00189	UJ	0.00192	UJ	0.00211	UJ	0.071	J	0.0018	UJ	0.00182	UJ	0.0264	NJ	0.000645	J	0.0022	UJ	0.00232	UJ	0.00186	U
4,4'-DDE	72-55-9	120	mg/kg	0.00901	UJ	0.00176	UJ	0.0147	J	0.00198	UJ	0.00189	UJ	0.00192	UJ	0.00409	J	0.0332	J	0.00278	J	0.00204	J	0.0323	J	0.00128	UJ	0.0022	UJ	0.00196	J	0.00186	U
4,4'-DDT	50-29-3	94	mg/kg	0.00852	J	0.00331	UJ	0.0657	NJ	0.0276	J	0.00354	UJ	0.00361	UJ	0.00287	UJ	0.0621	J	0.00229	J	0.00215	J	0.0666	UJ	0.00322	UJ	0.00413	UJ	0.00223	J	0.0035	U
Alpha-BHC	319-84-6	6.8	mg/kg	0.00375	UJ	0.000735	UJ	0.000724	UJ	0.000827	UJ	0.000787	UJ	0.000802	UJ	0.00088	UJ	0.00776	UJ	0.000751	UJ	0.000761	UJ	0.00848	UJ	0.000717	UJ	0.000918	UJ	0.000966	UJ	0.000777	U
Chlordane	57-74-9	--	mg/kg	0.0732	UJ	0.0143	UJ	0.0141	UJ	0.0161	UJ	0.0153	UJ	0.0156	UJ	0.0172	UJ	0.341	NJ	0.0146	UJ	0.0148	UJ	0.225	J	0.014	UJ	0.0179	UJ	0.0188	UJ	0.0151	U
cis-Chlordane	5103-71-9	47	mg/kg	0.0113	UJ	0.00221	UJ	0.00217	UJ	0.00248	UJ	0.00236	UJ	0.00241	UJ	0.00264	UJ	0.0285	NJ	0.00225	UJ	0.00228	UJ	0.0198	J	0.00215	UJ	0.00275	UJ	0.0029	UJ	0.00233	U
Dieldrin	60-57-1	2.8	mg/kg	0.00563	UJ	0.0011	UJ	0.00461	NJ	0.00124	UJ	0.00118	UJ	0.0012	UJ	0.00132	UJ	0.0116	UJ	0.00113	UJ	0.00114	UJ	0.0127	UJ	0.00108	UJ	0.00138	UJ	0.00145	UJ	0.00116	U
Endrin ketone	53494-70-5	--	mg/kg	0.00901	UJ	0.00176	UJ	0.00174	UJ	0.00198	UJ	0.00189	UJ	0.00192	UJ	0.00211	UJ	0.0186	UJ	0.0018	UJ	0.00182	UJ	0.0203	UJ	0.00172	UJ	0.0022	UJ	0.00232	UJ	0.00186	U
Heptachlor	76-44-8	29	mg/kg	0.0045	UJ	0.000882	UJ	0.000869	UJ	0.00213	NJ	0.000944	UJ	0.000963	UJ	0.00106	UJ	0.00931	UJ	0.000901	UJ	0.000913	UJ	0.0102	UJ	0.00086	UJ	0.0011	UJ	0.00116	UJ	0.000932	U
Lindane	58-89-9	23	mg/kg	0.00375	UJ	0.000735	UJ	0.000724	UJ	0.000827	UJ	0.000787	UJ	0.000802	UJ	0.00088	UJ	0.00776	UJ	0.000751	UJ	0.000761	UJ	0.00848	UJ	0.000717	UJ	0.000918	UJ	0.000966	UJ	0.000777	U
Methoxychlor	72-43-5	--	mg/kg	0.0169	UJ	0.00331	UJ	0.00326	UJ	0.00687	J	0.00354	UJ	0.00361	UJ	0.00396	UJ	0.0349	UJ	0.00338	UJ	0.00342	UJ	0.0381	UJ	0.00322	UJ	0.00413	UJ	0.00435	UJ	0.0035	U
trans-Chlordane	5103-74-2	--	mg/kg	0.0113	UJ	0.00221	UJ	0.00217	UJ	0.00248	UJ	0.00236	UJ	0.00241	UJ	0.00264	UJ	0.0395	J	0.00225	UJ	0.00228	UJ	0.0301	NJ	0.00215	UJ	0.00275	UJ	0.0029	UJ	0.00233	U
Polychlorinated Biphenyls by 8082A																													
Aroclor 1254	11097-69-1	25	mg/kg	0.0374	UJ	0.0358	UJ	0.0355	UJ	0.367	J	0.0412	UJ	0.04	UJ	0.0261	J	0.135	J	0.0374	UJ	0.0386	UJ	0.0874	UJ	0.0354	UJ	0.0467	UJ	0.048	UJ	0.0394	UJ
Aroclor 1260	11096-82-5	25	mg/kg	0.0276	J	0.00795	J	0.117	J	0.153	J	0.0412	UJ	0.04	UJ	0.0344	J	0.12	J	0.0374	UJ	0.0386	UJ	0.0316	J	0.0354	UJ	0.0467	UJ	0.048	UJ	0.0394	UJ
Total Metals by 6010C/7471B (Mercury)																													
Aluminum, Total	7429-90-5	--	mg/kg	13000		5400		5900		6200		8000		7800		6000		8700		10000		8700		4400		6700		6700		10000		7300	
Antimony, Total	7440-36-0	--	mg/kg	2.1	J	4.4	UJ	1.8	J	4.8	UJ	2.3	J	2.3	J	1.5	J	45	J	2.1	J	2.3	J	9.1	J	2.2	J	21	J	52	J	4.7	UJ
Arsenic, Total	7440-38-2	16	mg/kg	6.8		5.8		7.9		12		6.6		4		3.2		9.7		6	J	5.9	J	10		4.3		12		60		4.4	
Barium, Total	7440-39-3	10000	mg/kg	97		48		980		510		68		56		45		450		66		61		630		46		580		1900		44	
Beryllium, Total	7440-41-7	2700	mg/kg	0.66		0.31	J	0.37	J	0.32	J	0.41	J	0.38	J	0.36	J	0.72		0.47		0.41	J	0.32	J	0.33	J	0.54		0.31	J	0.33	J
Cadmium, Total	7440-43-9	60	mg/kg	0.89	U	0.1	J	1.1		1.7		0.37	J	0.07	J	0.35	J	1.7		0.1	J	0.12	J	4.3		0.13	J	0.46	J	2.9		0.68	J
Calcium, Total	7440-70-2	--	mg/kg	38000		100000		38000		38000		48000		3900		70000		62000		21000		5600		55000		4300		8400		33000		7800	
Chromium, Total	7440-47-3	--	mg/kg	19	J	10	J	27	J	24	J	14		12		11	J	120	J	14		12		29		9.8		16		83		10	J
Cobalt, Total	7440-48-4	--	mg/kg	9.6		3.6		4.2		5.2		7.8		7.1		3.8		5.7		7.8		7.7		5		6.5		7.3		22		6.7	
Copper, Total	7440-50-8	10000	mg/kg	24		14		82		52		20		20		39	J	120	J	25		22		110		18		120		10000		20	
Iron, Total	7439-89-6	--	mg/kg	22000		10000		9200		15000		17000	J	16000	J	11000		27000		18000		17000		32000	J	14000	J	37000	J	190000	J	16000	
Lead, Total	7439-92-1	3900	mg/kg	24	J	36	J	1600	J	3400	J	30		10		50	J	1700	J	26	J	24	J	4900		14		960		4500		15	J
Magnesium, Total	7439-95-4	--	mg/kg	9300		10000		6600		8600		12000		3900		10000		9600		7700		4300		5300		3700		440		2200		4300	
Manganese, Total	7439-96-5	10000	mg/kg	560		280		200		320		420		310		250		1000		350	J	410	J	370		340		280		1200		370	
Mercury, Total	7439-97-6	5.7	mg/kg	0.09	J	0.07	J	0.48	J	1.6	J	0.1	U	0.04	J	0.19		1.8		0.07	J	0.05	J	0.67	J	0.03	J	0.1	J	0.18	J	0.04	J
Nickel, Total	7440-02-0	10000	mg/kg	26		13		9.2		14		19		21		11		44		22		21		12		18		23		100		19	
Potassium, Total	7440-09-7	--	mg/kg	2400		1200		690		880		1500		590		1400	J	1000	J	1400		880		500		600		800		2000		750	
Selenium, Total	7782-49-2	6800	mg/kg	1.1	J	0.58	J	1.2	J	0.71	J	1.4	J	0.95	J	1.5	J	3		1.4	J	1.5	J	3.1		0.98	J	2.5		10		1.9	U
Silver, Total	7440-22-4	6800	mg/kg	0.89	U	0.87	U	0.22	J	0.24	J	0.94	U	0.93	U	1	U	0.54	J	0.91	U	0.91	U	0.41	J	0.88	U	1.2		9.2		0.95	U
Sodium, Total	7440-23-5	--	mg/kg	280		130	J	420		99	J	240		140	J	250		710		210		180		390		100	J	390		2600		190	U
Vanadium, Total	7440-62-2	--	mg/kg	25		14		23		18		20		14		15		45		18		15		19		12		26		24		13	
Zinc, Total	7440-66-6	10000	mg/kg	77	J	57	J	460	J	470	J	97		57		110		670		81	J	82	J	1600		61		380		3300		130	J

BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC

TABLE 1A

PRE-REMEDIAL SOIL/FILL CONTAMINATION SUMMARY
REMEDIAL INVESTIGATION

Site Management Plan
154 South Ogden Street Site
Buffalo, New York

Compound [1]	CasNum	ISCO [2]	Units	Sample Location, Collection Date, and Laboratory Qualifier																									
				SB-29 (2-6) 1/8/2013	Qual	SB-30 (0-2) 1/8/2013	Qual	SB-30 (2-6) 1/8/2013	Qual	SB-31 (2-4) 1/11/2013	Qual	SB-32 (2-4) 1/11/2013	Qual	SB-33 (10-12) 1/14/2013	Qual	MS/MSD SB-34 (0-2) 1/14/2013	Qual	MS/MSD SB-34 (4-5.5) 1/14/2013	Qual	SB-35 (10-12) 1/11/2013	Qual	SB-36 (0-2) 1/8/2013	Qual	SB-36 (6-10) 1/8/2013	Qual	SB-37 (10-12) 1/10/2013	Qual	SB-38 (10-12) 1/11/2013	Qual	MS/MSD SS-1 1/10/2013	Qual	SS-2 1/10/2013	Qual	SS-3 1/10/2013	Qual
General Chemistry																													
Solids, Total	NONE	--	%	86		81		81		77		72		82		81		72		69		69		83		69		70		70		70		62	
Volatile Organics by 8260C/5035																													
Acetone	67-64-1	1000	mg/kg	0.06		0.0042	J	0.71	U	0.011	U	0.027	U	0.011	J	0.0061	J	0.019	U	0.049		0.0056	J	0.12		0.14	J	0.014	U	-		-		-	
2-Butanone	78-93-3	1000	mg/kg	0.012		0.012	U	0.71	U	0.011	U	0.027	U	0.034	U	0.011	UJ	0.019	U	0.01	J	0.015	U	0.024		0.014	U	0.014	U	-		-		-	
Carbon Disulfide	75-15-0	--	mg/kg	0.098	U	0.012	U	0.71	U	0.011	U	0.027	U	0.034	U	0.011	U	0.019	U	0.022	U	0.015	U	0.0036	J	0.0071	J	0.014	U	-		-		-	
Cyclohexane	110-82-7	--	mg/kg	0.02	U	0.023	U	1.4	U	0.023	U	0.053	U	0.068	U	0.022	UJ	0.038	U	0.044	U	0.03	U	0.023	U	0.029	J	0.029	U	-		-		-	
Ethylbenzene	100-41-4	780	mg/kg	0.0098	U	0.0012	U	0.071	U	0.0011	U	0.0027	U	0.0034	U	0.0011	U	0.0019	U	0.0022	U	0.0015	U	0.0012	U	0.00033	J	0.0014	U	-		-		-	
p-Isopropyltoluene	99-87-6	--	mg/kg	0.00073	J	0.0012	U	0.071	U	0.0011	U	0.0027	U	0.0034	U	0.0011	UJ	0.0019	U	0.0022	U	0.0015	U	0.00081	J	0.094	J	0.0014	U	-		-		-	
Methyl cyclohexane	108-87-2	--	mg/kg	0.0039	U	0.0046	U	0.28	U	0.0046	U	0.011	U	0.014	U	0.0043	UJ	0.0075	U	0.0088	U	0.0059	U	0.0046	U	0.0058	U	0.0058	U	-		-		-	
Methylene chloride	75-09-2	1000	mg/kg	0.0098	U	0.012	U	0.71	U	0.011	U	0.027	U	0.034	U	0.011	UJ	0.019	U	0.022	U	0.015	U	0.012	U	0.0059	J	0.014	U	-		-		-	
Toluene	108-88-3	1000	mg/kg	0.0015	U	0.0017	U	0.049	J	0.0011	U	0.0027	U	0.0051	U	0.0016	U	0.0028	U	0.0033	U	0.0022	U	0.0017	U	0.0028	J	0.0028	U	-		-		-	
Semivolatile Organics by 8270D																													
2-Methylnaphthalene	91-57-6	--	mg/kg	0.46	U	0.24	U	4.9		0.26	U	1.4	U	1.2	U	0.25	U	0.28	U	2.8	U	2.8	U	0.86		2.9	U	2.8	U	0.56	U	0.28	U	0.32	U
3-Methylphenol/4-Methylphenol	108-39-4 / 106-44-5	1000	mg/kg	0.55	U	0.29	U	1.1	J	0.31	U	1.6	U	1.4	U	0.3	U	0.33	U	3.4	U	3.4	U	0.56	U	3.4	U	3.4	U	0.68	U	0.34	U	0.38	U
Acenaphthene	83-32-9	1000	mg/kg	0.24	J	0.071	J	3.3		0.17	U	0.91	U	0.81	U	0.16	U	0.18	U	1.9	U	2.5		3.5		2.3		1.9	U	0.38	U	0.19	U	0.21	U
Acenaphthylene	208-96-8	1000	mg/kg	0.41		0.094	J	5.4		0.17	U	0.91	U	0.81	U	0.16	U	0.18	U	1.9	U	3.1		0.78		1.9	U	1.1	J	0.38	U	0.19	U	0.21	U
Anthracene	120-12-7	1000	mg/kg	0.87		0.22		9.2		0.033	J	0.68	U	0.61	U	0.12	U	0.14	U	0.73	J	12		8.1		3.7		1.2	J	0.13	J	0.14	U	0.16	U
Benzo(a)anthracene	56-55-3	11	mg/kg	2.7		0.64		15		0.084	J	0.68	U	0.61	U	0.12	U	0.14	U	2.5		37		14		7.1		3.7	J	0.36		0.14	U	0.16	U
Benzo(a)pyrene	50-32-8	1.1	mg/kg	2.8		0.56		14		0.082	J	0.91	U	0.81	U	0.16	U	0.18	U	2.6		32		14		6.2		3.8	J	0.28	J	0.19	U	0.21	U
Benzo(b)fluoranthene	205-99-2	11	mg/kg	3.8		0.8		17		0.097	J	0.68	U	0.61	U	0.12	U	0.14	U	3		44		17	D	8		4.5	J	0.41		0.14	U	0.16	U
Benzo(ghi)perylene	191-24-2	1000	mg/kg	1.7		0.35		8.5		0.064	J	0.91	U	0.81	U	0.16	U	0.18	U	1.5	J	19		9.5		4		1.9	J	0.18	J	0.19	U	0.21	U
Benzo(k)fluoranthene	207-08-9	110	mg/kg	1.2		0.29		7		0.04	J	0.68	U	0.61	U	0.12	U	0.14	U	1.5		15		6.3		3.3		2.2	J	0.15	J	0.14	U	0.16	U
Benzoic Acid	65-85-0	--	mg/kg	1.2	U	0.66	U	6.5	U	0.7	U	3.7	U	3.3	U	0.66	U	0.74	U	7.7	U	7.7	U	1.3	U	7.8	U	7.6	U	1.5	U	0.76	U	0.86	U
Benzyl Alcohol	100-51-6	--	mg/kg	0.38	U	0.2	U	2	U	0.22	U	1.1	U	1	U	0.2	U	0.23	U	2.4	U	2.4	U	0.39	U	2.4	U	2.3	U	0.47	U	0.23	U	0.26	U
Bis(2-Ethylhexyl)phthalate	117-81-7	--	mg/kg	0.38	U	0.2	U	0.85	NJ	0.22	U	1.1	U	1	U	0.2	U	0.23	U	2.4	U	2.4	U	0.42	NJ	14		2.3	U	0.47	U	0.23	U	0.26	U
Butyl benzyl phthalate	85-68-7	--	mg/kg	0.38	U	0.2	U	2	U	0.22	U	1.1	U	1	U	0.2	U	0.23	U	2.4	U	2.4	U	0.39	U	17		2.3	U	0.47	U	0.23	U	0.26	U
Carbazole	86-74-8	--	mg/kg	0.67		0.16	J	5.1		0.22	U	1.1	U	1	U	0.2	U	0.23	U	0.52	J	3.2		4.8		2	J	1.4	J	0.47	U	0.23	U	0.26	U
Chrysene	218-01-9	110	mg/kg	2.9		0.68		15		0.082	J	0.68	U	0.61	U	0.12	U	0.14	U	2.6		37		16	D	6.9		4.3	J	0.34		0.14	U	0.16	U
Di-n-butylphthalate	84-74-2	--	mg/kg	0.38	U	0.2	U	2	U	0.22	U	1.1	U	1	U	0.2	U	0.23	U	2.4	U	2.4	U	0.39	U	5.6		2.3	U	0.47	U	0.23	U	0.26	U
Dibenzo(a,h)anthracene	53-70-3	1.1	mg/kg	0.55		0.098	J	2.6		0.13	U	0.68	U	0.61	U	0.12	U	0.14	U	1.4	U	6.4		2.4		1	J	0.69	J	0.28	U	0.14	U	0.16	U
Dibenzofuran	132-64-9	1000	mg/kg	0.26	J	0.063	J	6		0.22	U	1.1	U	1	U	0.2	U	0.23	U	2.4	U	1.5	J	3.6		1.1	J	0.67	J	0.47	U	0.23	U	0.26	U
Fluoranthene	206-44-0	1000	mg/kg	6		1.4		31		0.17		0.25	J	0.61	U	0.12	U	0.032	J	5.1		69		40	D	17		8.5	J	0.79		0.14	U	0.16	U
Fluorene	86-73-7	1000	mg/kg	0.36	NJ	0.089	J	7		0.22	U	1.1	U	1	U	0.2	U	0.23	U	2.4	U	3.5		6.5		1.8	J	0.95	J	0.47	U	0.23	U	0.26	U
Hexachlorobenzene	118-74-1	1.2	mg/kg	0.23	U	0.12	U	1.2	U	0.13	U	0.68	U	0.61	U	0.12	U	0.14	U	1.4	U	1.4	U	0.23	U	1.4	U	1.4	U	0.28	U	0.14	U	0.16	U
Indeno(1,2,3-cd)Pyrene	193-39-5	11	mg/kg	1.6		0.31		7.7		0.17	U	0.91	U	0.81	U	0.16	U	0.18	U	1.4	J	17		8.2		3.4		1.7	J	0.16	J	0.19	U	0.21	U
Naphthalene	91-20-3	1000	mg/kg	0.15	J	0.2	U	19		0.22	U	1.1	U	1	U	0.2	U	0.23	U	2.4	U	1	J	2		1.5	J	0.9	J	0.47	U	0.23	U	0.26	U
Phenanthrene	85-01-8	1000	mg/kg	3.8		1.1		36		0.14		0.68	U	0.61	U	0.12	U	0.14	U	2.8		37		35	D	14		9.9	J	0.56		0.14	U	0.16	U
Phenol	108-95-2	1000	mg/kg	0.38	U	0.2	U	0.66	J	0.22	U	1.1	U	1	U	0.2	U	0.23	U	2.4	U	2.4	U	0.39	U	2.4	U	2.3	U	0.47	U	0.23	U	0.26	U
Pyrene	129-00-0	1000	mg/kg	4.6		1.1		25		0.14		0.19	J	0.61	U	0.12	U	0.14	U	4.1		56		31	D	13		7.3	J	0.6		0.14	U	0.16	U
Total PAHs (CP-51) [3]		**500**	**mg/kg**	**34.06**		**8.002**		**223.36**		**1.152**		**0.44**		**ND**		**ND**		**0.032**		**30.23**		**393.9**		**214.67**		**95.6**		**54.94**		**4.43**		**ND**		**ND**	
Organochlorine Pesticides by 8081B																													
4,4'-DDD	72-54-8	180	mg/kg	0.0175	NJ	0.000857	J	0.00518	J	0.00279	NJ	0.00108	UJ	0.00183	U	0.00196	U	0.00211	U	0.0214	U	0.0328	J	0.0367	UJ	0.218	NJ	0.0103	J	0.00224	U	0.00218	UJ	0.0025	UJ
4,4'-DDE	72-55-9	120	mg/kg	0.00333	J	0.00608	NJ	0.0102	NJ	0.00673		0.0122	NJ	0.00506	J	0.00196	U	0.00391		0.00226	U	0.0228	UJ	0.0367	UJ	0.0437	U	0.00224	U	0.00768	NJ	0.00314	J	0.00268	J
4,4'-DDT	50-29-3	94	mg/kg	0.00204	UJ	0.0141	NJ	0.0084	NJ	0.0191	NJ	0.0293	NJ	0.00342	U	0.00367	U	0.0123	NJ	0.0074	U	0.0705	J	0.0688	UJ	0.0849	J	0.0042	UJ	0.00725	J	0.00239	J	0.00256	J
Alpha-BHC	319-84-6	6.8	mg/kg	0.00074	UJ	0.000779	UJ	0.000804	UJ	0.000841	U	0.00392	J	0.000761	U	0.00235	J	0.00088	U	0.000944	U	0.0095	UJ	0.0153	UJ	0.0182	U	0.000934	U	0.000934	U	0.000909	UJ	0.00104	UJ
Chlordane	57-74-9	--	mg/kg	0.0144	UJ	0.0152	UJ	0.0157	UJ	0.0164	U	0.017	UJ	0.0148	U	0.0159	U	0.0172	U	0.0184	U	0.3	J	0.298	UJ	0.319	U	0.0182	U	0.0182	U	0.0177	UJ	0.0203	UJ
cis-Chlordane	5103-71-9	47	mg/kg	0.00222	UJ	0.00234	UJ	0.00241	UJ	0.00265	J	0.00262	UJ	0.00228	U	0.00245	U	0.00264	U	0.00283	U	0.019	UJ	0.0459	UJ	0.0335	J	0.0028	U	0.0028	U	0.00273	UJ	0.00312	UJ
Dieldrin	60-57-1	2.8	mg/kg	0.00111	UJ	0.00117	UJ	0.00121	UJ	0.0024	NJ	0.00131	UJ	0.00114	U	0.00122	U	0.00132	U	0.00142	U	0.0142	UJ	0.0229	UJ	0.0273	U	0.0014	U	0.0014	U	0.00136	UJ	0.00156	UJ
Endrin ketone	53494-70-5	--	mg/kg	0.00178	UJ	0.00187	UJ	0.00193	UJ	0.00202	UJ	0.00209	UJ	0.00183	U	0.00196	U	0.00211	U	0.00226	U	0.0228	UJ	0.0367	UJ	0.0437	UJ	0.00224	U	0.00224	UJ	0.00218	UJ	0.0025	UJ
Heptachlor	76-44-8	29	mg/kg	0.000888	UJ	0.000935	UJ	0.000965	UJ	0.00101	U	0.00105	UJ	0.000913	U	0.000979	U	0.00106	U	0.00113	U	0.0114	UJ	0.0184	UJ	0.0219	U	0.00112	U	0.00112	U	0.00109	UJ	0.00125	UJ
Lindane	58-89-9	23	mg/kg	0.00074	UJ	0.000779	UJ	0.000804	UJ	0.000841	U	0.000872	UJ	0.000761	U	0.000816	U	0.00088	U	0.000944	U	0.0095	UJ	0.0153	UJ	0.0182	U	0.000934	UJ	0.000934	U	0.000909	UJ	0.00104	UJ
Methoxychlor	72-43-5	--	mg/kg	0.00333	UJ	0.0035	UJ	0.00362	UJ	0.00378	UJ	0.00392	UJ	0.00342	U	0.00367	U	0.00396	U	0.00425	U	0.0428	UJ	0.0688	UJ	0.082	UJ	0.0042	U	0.0042	UJ	0.00409	UJ	0.00468	UJ
trans-Chlordane	5103-74-2	--	mg/kg	0.00222	UJ	0.00234	UJ	0.00241	UJ	0.00252	U	0.00262	UJ	0.00228	U	0.00245	U	0.00264	U	0.00283	U	0.0174	J	0.0459	UJ	0.0355	NJ	0.0028	U	0.0028	U	0.00273	UJ	0.00312	UJ
Polychlorinated Biphenyls by 8082A																													
Aroclor 1254	11097-69-1	25	mg/kg	0.038	UJ	0.0396	UJ	0.0706	J	0.0164	J	0.0443	U	0.0384	UJ	0.0387	UJ	0.0456	UJ	0.032	J	0.0671	NJ	0.0382	UJ	0.229	UJ	0.0449	U	0.0461	UJ	0.0453	UJ	0.0521	UJ
Aroclor 1260	11096-82-5	25	mg/kg	0.038	UJ	0.00824	J	0.0382	J	0.00827	J	0.0111	J	0.0384	UJ	0.0387	UJ	0.0456	UJ	0.0464	U	0.0837	J	0.0447	J	0.229	UJ	0.0119	J	0.0108	J	0.0453	UJ	0.0521	UJ
Total Metals by 6010C/7471B (Mercury)																													
Aluminum, Total	7429-90-5	--	mg/kg	5800		5500		5300		6600		12000		5500		11000		8500		7400		6300		4400		4200		13000		6000		5200	J	14000	
Antimony, Total	7440-36-0	--	mg/kg	1.3	J	4.8	UJ	2.5	J	3.6	J	5.4	J	9.2	UJ	5.5	J	5.2	UJ	3.9	J	7.2	J	4	J	2.9	J	4	J	3.1	J	4	J	3.1	J
Arsenic, Total	7440-38-2	16	mg/kg	3.4		4.3		7.8		5.4		17		48		7.5		9.4		7.4		14		7.1		8.6		6.1		5.5		4.5	J	7.6	
Barium, Total	7440-39-3	10000	mg/kg	83		81		530		660	J	540	J	1600		100		230		630	J	700		300		360	J	100	J	72		42	J	110	
Beryllium, Total	7440-41-7	2700	mg/kg	0.29	J	0.28	J	0.31	J	0.34	J	1.1		0.09	J	0.59		0.7		0.41	J	0.4	J	0.21	J	0.25	J	0.61		0.37	J	0.33	J	1.1	
Cadmium, Total	7440-43-9	60	mg/kg	0.18	J	0.77	J	2		0.83	J	1.2		12		0.06	J	0.6	J	1.1		2.5		8.9		3.1		0.77	J	0.77	J	2.7	U	0.26	J
Calcium, Total	7440-70-2	--	mg/kg	7000		4000		34000		9400		11000		31000		4500		5200		43000		29000		20000		30000		20000		67000		190000	J	45000	
Chromium, Total	7440-47-3	--	mg/kg	9.5		9.7		24		26		30		110	J	21	J	12	J	19		26		13		30		25	J	13		10	J	19	
Cobalt, Total	7440-48-4	--	mg/kg	5.6		5.5		5.1		6.4		12		28		11		8.5		4.5		6.8		5.1		5.4		11		5.5		5.3	J	8.8	
Copper, Total	7440-50-8	10000	mg/kg	18		21		27		24		110		820		410		45		25		55		90		48		40		21		12	J	27	
Iron, Total	7439-89-6	--	mg/kg	12000	J	13000	J	12000	J	18000		18000		340000		24000		8800		10000		52000	J	27000	J	16000		27000		14000		10000	J	22000	
Lead, Total	7439-92-1	3900	mg/kg	300		140		1700		2500	J	450	J	2600	J	43	J	73	J	2000	J	3600		590		1200	J	78	J	77	J	13	J	45	J
Magnesium, Total	7439-95-4	--	mg/kg	3600		2800		6000		4200	J	1400	J	1500		4500		440		6300	J	4600		2800		4600	J	8600	J	15000		7400		13000	
Manganese, Total	7439-96-5	10000	mg/kg	280		280		300		270		240		1600		540		120		210		610		250		230		460		320		250		670	
Mercury, Total	7439-97-6	5.7	mg/kg	0.07	J	0.09	J	0.36	J	0.13		0.09	J	0.12	J	0.08	J	0.03	J	0.86		1.1	J	0.43	J	1.9		0.51		0.1	J	0.03	J	0.09	J
Nickel, Total	7440-02-0	10000	mg/kg	15		16		19		17		31		190		30		18		11		16		16		13		33		16	J	12	J	21	J
Potassium, Total	7440-09-7	--	mg/kg	610		720		770		960		1300		1300		1600		890		1200		700		520		670		1800		1400	J	1200	J	3000	J
Selenium, Total	7782-49-2	6800	mg/kg	0.98	J	0.93	J	1.6	J	1.3	J	2.5		3.7	U	0.75	J	0.48	J	1.1	J	2.5		1.4	J	1.8	J	1.7	J	1.1	J	1.7	J	1.4	J
Silver, Total	7440-22-4	6800	mg/kg	0.88	U	0.96	U	0.31	J	0.21	J	0.6	J	6.7		0.7	J	1	U	0.28	J	1.4		0.44	J	1.1	U	0.27	J	0.69	J	2.7	U	1.2	U
Sodium, Total	7440-23-5	--	mg/kg	92	J	140	J	330		93	J	680		1400		170	J	370		160	J	560		1200		330		220		460		540	U	370	
Vanadium, Total	7440-62-2	--	mg/kg	12		12		21		15		41		1.6	J	24		28		23		28		15		15		23		15		13	J	24	
Zinc, Total	7440-66-6	10000	mg/kg	91		120		630		410		550		2500	J	130	J	81	J	570		970		6300		950		180		140	J	45	J	160	J

TABLE 1A

BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC

PRE-REMEDIAL SOIL/FILL CONTAMINATION SUMMARY
REMEDIAL INVESTIGATION

Site Management Plan
154 South Ogden Street Site
Buffalo, New York

Compound [1]	CasNum	ISCO [2]	Units	Sample Location, Collection Date, and Laboratory Qualifier									
				SS-4 1/17/2013	Qual	SS-5 1/18/2013	Qual	SS-6 1/17/2013	Qual	SS-7 1/11/2013	Qual	SS-8 1/18/2013	Qual
General Chemistry													
Solids, Total	NONE	--	%	70		63		73		42		64	
Volatile Organics by 8260C/5035													
Acetone	67-64-1	1000	mg/kg	-		-		-		-		-	
2-Butanone	78-93-3	1000	mg/kg	-		-		-		-		-	
Carbon Disulfide	75-15-0	--	mg/kg	-		-		-		-		-	
Cyclohexane	110-82-7	--	mg/kg	-		-		-		-		-	
Ethylbenzene	100-41-4	780	mg/kg	-		-		-		-		-	
p-Isopropyltoluene	99-87-6	--	mg/kg	-		-		-		-		-	
Methyl cyclohexane	108-87-2	--	mg/kg	-		-		-		-		-	
Methylene chloride	75-09-2	1000	mg/kg	-		-		-		-		-	
Toluene	108-88-3	1000	mg/kg	-		-		-		-		-	
Semivolatile Organics by 8270D													
2-Methylnaphthalene	91-57-6	--	mg/kg	1.4	U	0.32	U	0.14	J	0.46	U	0.62	U
3-Methylphenol/4-Methylphenol	108-39-4 / 106-44-5	1000	mg/kg	1.7	U	0.38	U	0.32	U	0.56	U	0.75	U
Acenaphthene	83-32-9	1000	mg/kg	0.45	J	0.15	J	0.18	U	0.31	U	0.18	J
Acenaphthylene	208-96-8	1000	mg/kg	1.2		0.14	J	0.18	U	0.31	U	0.19	J
Anthracene	120-12-7	1000	mg/kg	2.4		0.49		0.04	J	0.086	J	0.92	
Benzo(a)anthracene	56-55-3	11	mg/kg	5.4		1.8		0.16		0.29		3.3	
Benzo(a)pyrene	50-32-8	1.1	mg/kg	5		1.5		0.16	J	0.31		2.3	
Benzo(b)fluoranthene	205-99-2	11	mg/kg	6.5		2.1		0.25		0.42		4	
Benzo(ghi)perylene	191-24-2	1000	mg/kg	2.5		0.9		0.11	J	0.18	J	1.4	
Benzo(k)fluoranthene	207-08-9	110	mg/kg	2.7		0.67		0.089	J	0.13	J	1.2	
Benzoic Acid	65-85-0	--	mg/kg	3.8	U		R	0.74		0.48	J		R
Benzyl Alcohol	100-51-6	--	mg/kg	1.2	U	0.26	U	0.25		0.39	U	0.52	U
Bis(2-Ethylhexyl)phthalate	117-81-7	--	mg/kg	1.2	U	0.26	U	0.22	U	0.39	U	0.52	U
Butyl benzyl phthalate	85-68-7	--	mg/kg	1.2	U	0.26	U	0.22	U	0.39	U	0.52	U
Carbazole	86-74-8	--	mg/kg	0.59	J	0.36		0.038	J	0.39	U	0.57	
Chrysene	218-01-9	110	mg/kg	4.7		1.7		0.19		0.31		3.5	
Di-n-butylphthalate	84-74-2	--	mg/kg	1.2	U	0.26	U	0.22	U	0.066	J	0.52	U
Dibenzo(a,h)anthracene	53-70-3	1.1	mg/kg	0.83		0.25		0.13	U	0.23	U	0.58	
Dibenzofuran	132-64-9	1000	mg/kg	0.34	J	0.096	J	0.22	U	0.39	U	0.14	J
Fluoranthene	206-44-0	1000	mg/kg	13		3.3		0.33		0.6		6	
Fluorene	86-73-7	1000	mg/kg	0.94	J	0.15	J	0.22	U	0.39	U	0.26	J
Hexachlorobenzene	118-74-1	1.2	mg/kg	0.7	U	0.16	U	0.13	U	0.23	U	0.31	U
Indeno(1,2,3-cd)Pyrene	193-39-5	11	mg/kg	3.2		1.1		0.12	J	0.16	J	1.6	
Naphthalene	91-20-3	1000	mg/kg	1.2	U	0.26	U	0.14	J	0.39	U	0.52	U
Phenanthrene	85-01-8	1000	mg/kg	7.1		1.9		0.22		0.37		4.2	
Phenol	108-95-2	1000	mg/kg	1.2	U	0.26	U	0.22	U	0.39	U	0.52	U
Pyrene	129-00-0	1000	mg/kg	9.2		2.6		0.27		0.49		4.4	
Total PAHs (CP-51) [3]		**500**	**mg/kg**	**66.32**		**19.01**		**2.299**		**3.736**		**34.55**	
Organochlorine Pesticides by 8081B													
4,4'-DDD	72-54-8	180	mg/kg	0.0022	U	0.00248	U	0.00209	U	0.00361	U	0.00244	U
4,4'-DDE	72-55-9	120	mg/kg	0.0022	U	0.0185	J	0.00212		0.0127	NJ	0.00817	NJ
4,4'-DDT	50-29-3	94	mg/kg	0.00413	U	0.0319		0.00454	J	0.0154		0.0378	J
Alpha-BHC	319-84-6	6.8	mg/kg	0.000918	U	0.00104	U	0.00087	U	0.0015	U	0.00126	NJ
Chlordane	57-74-9	--	mg/kg	0.0179	U	0.0202	U	0.017	U	0.0293	U	0.122	
cis-Chlordane	5103-71-9	47	mg/kg	0.00364	NJ	0.00311	U	0.00261	U	0.00451	U	0.00774	NJ
Dieldrin	60-57-1	2.8	mg/kg	0.00138	U	0.00155	U	0.0013	U	0.00226	U	0.00152	U
Endrin ketone	53494-70-5	--	mg/kg	0.0022	U	0.00782	NJ	0.00209	U	0.00361	U	0.00881	NJ
Heptachlor	76-44-8	29	mg/kg	0.0011	U	0.00124	U	0.00104	U	0.0018	U	0.00122	U
Lindane	58-89-9	23	mg/kg	0.000918	U	0.00104	U	0.00087	U	0.0015	U	0.00101	U
Methoxychlor	72-43-5	--	mg/kg	0.00413	U	0.00466	U	0.00391	U	0.00677	U	0.00456	UJ
trans-Chlordane	5103-74-2	--	mg/kg	0.00275	U	0.00311	U	0.00261	U	0.00451	U	0.00726	NJ
Polychlorinated Biphenyls by 8082A													
Aroclor 1254	11097-69-1	25	mg/kg	0.0457	UJ	0.102	UJ	0.0445	UJ	0.0344	J	0.1	UJ
Aroclor 1260	11096-82-5	25	mg/kg	0.0138	J	0.102	UJ	0.0127	J	0.0365	J	0.1	UJ
Total Metals by 6010C/7471B (Mercury)													
Aluminum, Total	7429-90-5	--	mg/kg	10000		7500		12000		12000		5500	
Antimony, Total	7440-36-0	--	mg/kg	2.8	J	2.2	J	6.8	J	7.8	J	1.8	J
Arsenic, Total	7440-38-2	16	mg/kg	7.2	J	6.3	J	29	J	18		5.1	J
Barium, Total	7440-39-3	10000	mg/kg	150		130		340		290		320	
Beryllium, Total	7440-41-7	2700	mg/kg	0.43		0.37	J	1		1		0.27	J
Cadmium, Total	7440-43-9	60	mg/kg	0.41	J	0.73	J	2.5		6.9		1.6	
Calcium, Total	7440-70-2	--	mg/kg	42000		7000		7100		19000		19000	
Chromium, Total	7440-47-3	--	mg/kg	22		14		26		45		18	
Cobalt, Total	7440-48-4	--	mg/kg	8.2		6.7		7.8		11		6.1	
Copper, Total	7440-50-8	10000	mg/kg	54		25		120		110		24	
Iron, Total	7439-89-6	--	mg/kg	22000		15000		44000		25000		11000	
Lead, Total	7439-92-1	3900	mg/kg	280	J	330	J	280	J	660	J	950	J
Magnesium, Total	7439-95-4	--	mg/kg	5400		3200		1500		1600		4300	
Manganese, Total	7439-96-5	10000	mg/kg	680	J	340	J	280	J	620		270	J
Mercury, Total	7439-97-6	5.7	mg/kg	0.09	J	0.12	J	0.28		0.34	J	0.19	
Nickel, Total	7440-02-0	10000	mg/kg	47		18		28		41	J	16	
Potassium, Total	7440-09-7	--	mg/kg	1800		1400		1000		2000	J	970	
Selenium, Total	7782-49-2	6800	mg/kg	1	J	1.8	J	2.6		5.7		0.97	J
Silver, Total	7440-22-4	6800	mg/kg	0.22	J	1.2	U	0.69		0.95	J	1.2	U
Sodium, Total	7440-23-5	--	mg/kg	590		230	J	720		360	J	300	
Vanadium, Total	7440-62-2	--	mg/kg	21		17		24		40		14	
Zinc, Total	7440-66-6	10000	mg/kg	240	J	350	J	650	J	1100	J	580	J

TABLE 1A

PRE-REMEDIAL SOIL/FILL CONTAMINATION SUMMARY
REMEDIAL INVESTIGATION

Site Management Plan
154 South Ogden Street Site
Buffalo, New York

Notes:
1. Only compounds detected with reporting limits that exceed the corresponding regulatory standard in at least one sample are included on the summary sheets.
2. Restricted-Industrial Use Soil Cleanup Objective per 6NYCRR Part 375.
3. In accordance with NYSDEC Soil Cleanup Guidance, Policy CP-51, compounds only include the total of those polycyclic aromatic hydrocarbons (PAHs) detected above the laboratory method detection limit.

Qualifier Key:

B	The analyte was detected above the reporting limit in the associated method blank.
NJ	The detection is tentative in identification and estimated in value. Although there is presumptive evidence of the analyte, the result should be used with caution as a potential false positive and/or elevated qantitative value.
J	The analyte was positively identified; the associated numerical value is an approximate concentration of the analyte in the sample.
R	The data are unusable. The analyte may or may not be present.
D	Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
U	The analyte was analyzed for, but was not detected above the level of the associated reported quantitation limit.
UJ	The analyte was not detected. The associated reported quantitation limit is an estimate and may be inaccurate or imprecise.
EMPC	The results do not meet all criteria for a confirmed identification. The quantitative value represents the Estimated Maximum Possible Concentration of the analyte in the sample

Color Code:

= concentration exceeds the individual Restricted-Industrial Use Soil Cleanup Objective (SCO) or the CP-51 total PAH concentration of 500 ppm.

BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC

TABLE 1B

PRE-REMEDIAL SOIL/FILL CONTAMINATION SUMMARY
SUPPLEMENTAL REMEDIAL INVESTIGATION

Site Management Plan
154 South Ogden Street Site
Buffalo, New York

Compound [1]	CasNum	ISCO [2]	Units	Sample Location, Collection Date, and Laboratory Qualifier																			
				SB-14 Vicinity														SB-16 Vicinity					
				SB-14 (8-10) 1/3/2013	Qual	SB-40 (8-10) 3/11/2013	Qual	SB-41 (8-10) 3/11/2013	Qual	SB-42 (8-10) 3/11/2013	Qual	SB-43 (8-10) 3/11/2013	Qual	Waste Char. #2 SB-58 (8-10) 3/12/2013	Qual	SB-16 (6-8) 1/4/2013	Qual	SB-44 (6-8) 3/11/2013	Qual	SB-45 (6-8) 3/11/2013	Qual	SB-46 (6-8) 3/11/2013	Qual	SB-47 (6-8) 3/11/2013	Qual
General Chemistry - Westborough Lab																							
Solids, Total	NONE	--	%	52		73.6		87.3		78.6		80.2		-		79		75.4		83		82.1		82.6	
Semivolatile Organics by GC/MS - Westborough Lab ***(PAHs in blue)***																							
2-Methylnaphthalene	91-57-6	--	mg/kg	3.8	U	-		-		-		-		-		3		2.8		0.85		1.5		0.91	J
Acenaphthene	83-32-9	1000	mg/kg	2.5	U	-		-		-		-		-		12		4.2		2.3		4.3		5.6	
Acenaphthylene	208-96-8	1000	mg/kg	1.3	J	-		-		-		-		-		2		2		0.98		0.88		0.82	
Anthracene	120-12-7	1000	mg/kg	2.8		-		-		-		-		-		28		12		6.5		11		16	
Benzo(a)anthracene	56-55-3	11	mg/kg	7		-		-		-		-		-		47		17		11		22		28	
Benzo(a)pyrene	50-32-8	1.1	mg/kg	6.4		-		-		-		-		-		41		13		9.6		20		25	
Benzo(b)fluoranthene	205-99-2	11	mg/kg	8.1		-		-		-		-		-		53		18		13		26		33	
Benzo(ghi)perylene	191-24-2	1000	mg/kg	3.8		-		-		-		-		-		20		6.7		4.9		10		12	
Benzo(k)fluoranthene	207-08-9	110	mg/kg	3.6		-		-		-		-		-		19		6.7		4.4		11		11	
Carbazole	86-74-8	--	mg/kg	1.4	J	-		-		-		-		-		11		6		2.5		5.5		5.1	
Chrysene	218-01-9	110	mg/kg	6.6		-		-		-		-		-		45		17		12		22		29	
Dibenzo(a,h)anthracene	53-70-3	1.1	mg/kg	0.97	J	-		-		-		-		-		6.2		2		1.6		3.1		3.7	
Dibenzofuran	132-64-9	1000	mg/kg	0.71	J	-		-		-		-		-		8.4		4.8		2		3.5		3.2	
Fluoranthene	206-44-0	1000	mg/kg	15		-		-		-		-		-		100	D	43		27	D	52	D	66	D
Fluorene	86-73-7	1000	mg/kg	1	J	-		-		-		-		-		15		7.2		3.5		4.8		6.4	
Indeno(1,2,3-cd)Pyrene	193-39-5	11	mg/kg	3.4		-		-		-		-		-		25		8.2		5.8		12		14	
Naphthalene	91-20-3	1000	mg/kg	3.1	U	-		-		-		-		-		6.4		6.8		1.5		3.5		1.8	
Phenanthrene	85-01-8	1000	mg/kg	11		-		-		-		-		-		92	D	48	D	25	D	47	D	52	D
Pyrene	129-00-0	1000	mg/kg	12		-		-		-		-		-		80		32		21	D	41	D	52	D
Total PAHs (CP-51) [3]		**500**	**mg/kg**	**82.97**		**-**		**-**		**-**		**-**		**-**		**591.6**		**243.8**		**150.08**		**290.58**		**356.32**	
Total Metals - Westborough Lab																							
Lead, Total	7439-92-1	3900	mg/kg	3,700	J	600	J	120	J	840	J	280	J	-		-		-		-		-		-	
TCLP Metals by EPA 1311 - Westborough Lab																							
Arsenic, TCLP	7440-38-2	5	mg/L	-		-		-		-		-		0.03	J	-		-		-		-		-	
Barium, TCLP	7440-39-3	100	mg/L	-		-		-		-		-		0.79		-		-		-		-		-	
Lead, TCLP	7439-92-1	5	mg/L	-		-		-		-		-		0.06	J	-		-		-		-		-	

Notes:

1. Only compounds detected with reporting limits that exceed the corresponding regulatory standard in at least one sample are included on the summary sheets.
2. Restricted-Industrial Use Soil Cleanup Objective per 6NYCRR Part 375. TCLP results were compared to 40CFR Part 261 toxicity characteristic criteria.
3. In accordance with NYSDEC Soil Cleanup Guidance, Policy CP-51, compounds only include the total of those polycyclic aromatic hydrocarbons (PAHs) detected above the laboratory method detection limit.

Qualifier Key:

"-" Sample not analyzed for compound.
J Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
D Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
U Not detected at the reported detection limit for the sample.

Color Code:

= concentration exceeds the individual Restricted-Residential Use Soil Cleanup Objective (SCO) or the CP-51 total PAH concentration of 500 ppm.

BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC

TABLE 1C

PRE-REMEDIAL SOIL/FILL CONTAMINATION SUMMARY
WESTERN PORTION OF SITE

Site Management Plan
154 South Ogden Street Site
Buffalo, New York

Compound [1]	CasNum	ISCO [2]	Units	Sample Location, Collection Date, and Laboratory Qualifier																							
				SB-59 (0-2) 11/12/2013	Qual	SB-60 (0-2) 11/12/2013	Qual	SB-61 (0-2) 11/12/2013	Qual	SB-62 (0-2) 11/12/2013	Qual	SB-63 (0-2) 11/12/2013	Qual	SB-64 (0-2) 11/12/2013	Qual	SB-65 (0-2) 11/12/2013	Qual	SB-66 (0-2) 11/12/2013	Qual	SB-67 (0-2) 11/12/2013	Qual	SB-68 (0-2) 11/12/2013	Qual	SB-69 (0-2) 11/12/2013	Qual	BLIND DUP [4] 11/12/2013	Qual	SB-70 11/12/2013	Qual
General Chemistry - Westborough Lab																											
Solids, Total	NONE	--	%	83		77.2		84.6		78.3		85.8		77		76.3		76		85.8		81.8		82.9		71.9		85.4	
Semivolatile Organics by GC/MS - Westborough Lab (PAHs in blue)																											
2,4-Dinitrotoluene	121-14-2	--	mg/kg	1.2	U	0.42	U	0.19	U	0.42	U	0.19	U	0.43	U	0.42	U	0.21	U	0.19	U	0.85		1	U	0.22	U	0.19	U
2-Methylnaphthalene	91-57-6	--	mg/kg	1.1	J	0.5	U	0.23	U	0.51	U	0.23	U	0.52	U	0.51	U	0.25	U	0.23	U	0.089	J	1.2	U	0.27	U	0.24	
Acenaphthene	83-32-9	1000	mg/kg	3.4		0.34	U	0.16	U	0.34	U	0.15	U	0.13	J	0.33	J	0.17	U	0.054	J	0.079	J	0.8	U	0.18	U	0.49	
Acenaphthylene	208-96-8	1000	mg/kg	2.6		0.092	J	0.039	J	0.22	J	0.15	U	0.2	J	0.64		0.17	U	0.074	J	0.17		0.8	U	0.18	U	0.35	
Anthracene	120-12-7	1000	mg/kg	10		0.37		0.077	J	0.26		0.068	J	0.46		1.2		0.13	U	0.2		0.31		0.6	U	0.06	J	1.5	J
Benzo(a)anthracene	56-55-3	11	mg/kg	20		0.99		0.24		0.79		0.16		1.1		3.1		0.068	J	0.43		0.87		0.6	U	0.18		2.1	J
Benzo(a)pyrene	50-32-8	1.1	mg/kg	18		0.85		0.21		0.71		0.15		0.91		2.6		0.055	J	0.36		0.74		0.8	U	0.15	J	1.5	J
Benzo(b)fluoranthene	205-99-2	11	mg/kg	23		1.1		0.28		0.92		0.22		1.3		3.7		0.074	J	0.5		0.96		0.6	U	0.28		2.3	J
Benzo(ghi)perylene	191-24-2	1000	mg/kg	8.8		0.46		0.11	J	0.42		0.086	J	0.5		1.4		0.17	U	0.2		0.44		0.8	U	0.12	J	0.77	
Benzo(k)fluoranthene	207-08-9	110	mg/kg	9.6		0.42		0.12		0.4		0.072	J	0.47		1.2		0.13	U	0.2		0.31		0.6	U	0.078	J	0.77	
Carbazole	86-74-8	--	mg/kg	4.4		0.11	J	0.19	U	0.099	J	0.19	U	0.18	J	0.48		0.21	U	0.096	J	0.2		1	U	0.22	U	0.53	
Chrysene	218-01-9	110	mg/kg	21		0.93		0.24		0.78		0.16		1		2.9		0.059	J	0.38		0.86		0.6	U	0.19		1.9	J
Di-n-butylphthalate	84-74-2	--	mg/kg	1.2	U	0.42	U	0.19	U	0.42	U	0.19	U	0.43	U	0.42	U	0.21	U	0.11	J	0.2	U	1	U	0.22	U	0.19	
Dibenzo(a,h)anthracene	53-70-3	1.1	mg/kg	2.6		0.14	J	0.12	U	0.11	J	0.12	U	0.14	J	0.48		0.13	U	0.066	J	0.13		0.6	U	0.14	U	0.28	
Dibenzofuran	132-64-9	1000	mg/kg	2.4		0.42	U	0.19	U	0.42	U	0.19	U	0.43	U	0.25	J	0.21	U	0.19	U	0.087	NJ	1	U	0.22	U	0.62	
Fluoranthene	206-44-0	1000	mg/kg	42		2		0.45		1.6		0.35		2.3		5.9		0.12	J	0.87		1.8		0.22	J	0.26		3.8	J
Fluorene	86-73-7	1000	mg/kg	3.8		0.12	J	0.19	U	0.42	U	0.19	U	0.21	J	0.42		0.21	U	0.077	J	0.1	J	1	U	0.22	U	1.2	J
Indeno(1,2,3-cd)Pyrene	193-39-5	11	mg/kg	10		0.5		0.13	J	0.36		0.076	J	0.45		1.3		0.17	U	0.19		0.39		0.8	U	0.1	J	0.76	
Naphthalene	91-20-3	1000	mg/kg	1.8		0.42	U	0.19	U	0.42	U	0.19	U	0.43	U	0.25	J	0.21	U	0.19	U	0.27		1	U	0.1	J	0.22	
Phenanthrene	85-01-8	1000	mg/kg	35		1.2		0.23		0.91		0.25		1.9		4.2		0.063	J	0.66		1.5		0.22	J	0.18		4.2	J
Pyrene	129-00-0	1000	mg/kg	36		1.6		0.37		1.3		0.27		1.8		4.7		0.098	J	0.65		1.4		0.6	U	0.21		2.7	J
Total PAHs [3]		***500***	***mg/kg***	***247.6***		***10.77***		***2.686***		***8.780***		***1.862***		***12.87***		***34.32***		***0.5370***		***4.911***		***10.33***		***0.4400***		***2.268***		***24.84***	
Total Metals - Westborough Lab																											
Arsenic, Total	7440-38-2	16	mg/kg	9	J	7.2	J	5.4	J	14	J	4.8	J	10	J	10	J	12	J	9.5	J	9	J	32	J	71	J	6.3	J
Barium, Total	7440-39-3	10000	mg/kg	280	J	120	J	88	J	550	J	50	J	210	J	270	J	360	J	170	J	280	J	1300	J	1500	J	100	J
Cadmium, Total	7440-43-9	60	mg/kg	1.4		0.86		0.89		2.5		0.55		1.4		1.7		1.9		1.3		2		6.8		7.4		0.77	
Chromium, Total	7440-47-3	--	mg/kg	18	J	14	J	12	J	31	J	9.5	J	18	J	18	J	27	J	18	J	19	J	65	J	84	J	14	J
Lead, Total	7439-92-1	3900	mg/kg	1400	J	210	J	160	J	870	J	26	J	440	J	610	J	1100	J	240	J	530	J	2500	J	3600	J	140	J
Mercury, Total	7439-97-6	5.7	mg/kg	1.3		0.47		0.18		0.21		0.1	U	0.2		0.49		0.03	J	0.19		0.07	J	0.82		1.4		0.35	
Selenium, Total	7782-49-2	6800	mg/kg	0.32	J	0.99	U	0.14	J	2	U	0.89	U	0.17	J	0.4	J	2.1	U	1.8	U	1.9	U	0.55	J	1.7	J	0.91	U
Silver, Total	7440-22-4	6800	mg/kg	0.52		0.5	U	0.44	U	1		0.45	U	2.7		0.69		0.79	J	0.4	J	0.52	J	3.7		5.6		0.18	J

Notes:

1. Only compounds detected with reporting limits that exceed the corresponding regulatory standard in at least one sample are included on the summary sheets.
2. Restricted-Industrial Use Soil Cleanup Objective per 6NYCRR Part 375.
3. In accordance with NYSDEC Soil Cleanup Guidance, Policy CP-51, compounds only include the total of those polycyclic aromatic hydrocarbons (PAHs) detected above the laboratory method detection limit.
4. Blind duplicate of SB-69.

Qualifier Key:

J = Estimated value.
U = Not detected at the reported detection limit for the sample.
NJ = The detection is tenatative in identification and estimated in value. Although there is presumptive evidence of the analyte, the result should be used with caution as a potential false positive and/or elevated quantitation value.

Color Code:

= Concentration exceeds the individual Restricted-Industrial Use Soil Cleanup Objective (SCO) or the CP-51 total PAH concentration of 500 ppm.
= Third party validator change/addition.

BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC

TABLE 2A

PRE-REMEDIAL GROUNDWATER CONTAMINATION SUMMARY
REMEDIAL INVESTIGATION

Site Management Plan
154 South Ogden Street Site
Buffalo, New York

Compound [1]	CasNum	GWQS/GV [2]	Units	Sample Location, Collection Date, and Laboratory Qualifier																			
				BLIND DUP MW-1	Qual	MS/MSD MW-1	Qual	MS/MSD MW-2	Qual	MW-2	Qual	MW-3	Qual	BLIND DUP MW-3	Qual	MW-4	Qual	MW-4	Qual	MW-5	Qual	MW-5	Qual
				1/22/2013		8/15/2013		1/22/2013		8/15/2013		1/22/2013		8/15/2013		1/22/2013		8/15/2013		1/23/2013		8/15/2013	
Volatile Organics by GC/MS - Westborough Lab																							
Acetone	67-64-1	50	ug/L	5	UJ	5	U	5	UJ	5	U	5	UJ	5	U	5	UJ	5	U	5	UJ	5	U
Benzene	71-43-2	1	ug/L	0.5	U	0.5	U	0.3	J	0.5	U	0.5	U	0.5	U	1	U	0.5	U	0.5	U	0.5	U
Chlorobenzene	108-90-7	5	ug/L	2.5	U	2.5	U	24		9.8		2.5	U	2.5	U	5	U	2.5	U	2.5	U	2.5	U
1,2-Dichlorobenzene	95-50-1	3	ug/L	2.5	U	2.5	U	8.3		3.3		2.5	U	2.5	U	5	U	2.5	U	2.5	U	2.5	U
1,3-Dichlorobenzene	541-73-1	3	ug/L	2.5	U	2.5	U	0.74	J	2.5	U	2.5	U	2.5	U	5	U	2.5	U	2.5	U	2.5	U
1,4-Dichlorobenzene	106-46-7	3	ug/L	2.5	U	2.5	U	1.5	J	0.72	J	2.5	U	2.5	U	5	U	2.5	U	2.5	U	2.5	U
cis-1,2-Dichloroethene	156-59-2	5	ug/L	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	75		9.4		2.5	U	2.5	U
p-Isopropyltoluene	99-87-6	5	ug/L	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	5	U	2.5	U	1.3	J	2.5	U
Methyl tert butyl ether	1634-04-4	10	ug/L	2.5	U	2.5	U	0.86	J	2.5	U	2.5	U	2.5	U	5	U	2.5	U	2.5	U	2.5	U
Semivolatile Organics by GC/MS - Westborough Lab																							
4-Chloroaniline	106-47-8	5	ug/L	5	U	5	U	2.6	J	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Acenaphthene	83-32-9	20	ug/L	0.2	U	0.2	U	0.07	J	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	1.8	
Anthracene	120-12-7	50	ug/L	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.08	J
Fluoranthene	206-44-0	50	ug/L	0.2	U	0.2	U	0.2	U	0.05	J	0.2	U	0.2	U	0.2	U	0.2	U	0.11	J	0.35	
Fluorene	86-73-7	50	ug/L	0.2	U	0.2	U	0.23		0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.1	J
2-Methylnaphthalene	91-57-6	-	ug/L	0.2	U	0.2	U	0.42		0.13	J	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
Naphthalene	91-20-3	10	ug/L	0.2	U	0.2	U	0.16	J	0.1	J	0.2	U	0.2	U	0.2	U	0.2	U	0.09	J	0.2	U
Phenanthrene	85-01-8	50	ug/L	0.32		0.32		0.15	J	0.2	U	0.2	U	0.2	U	0.08	J	0.2	U	0.18	J	0.2	U
Pyrene	129-00-0	50	ug/L	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.1	J	0.21	
Total Metals - Westborough Lab																							
Aluminum, Total	7429-90-5	-	ug/L	81	J	--		142		--		167		--		90	J	--		460		--	
Antimony, Total	7440-36-0	3	ug/L	1.8	J	--		5	U	--		1	J	--		5	U	--		5	U	--	
Arsenic, Total	7440-38-2	25	ug/L	2.8	J	1.78		4.2	J	4.94		5	U	1.23		3.1	J	4.12		3.5	J	0.66	
Barium, Total	7440-39-3	1000	ug/L	141.9		124.6		131.4		154		77.1		88.75		101.9		63.52		139.3		335	
Cadmium, Total	7440-43-9	5	ug/L	5	U	0.2	U	5	U	0.2	U	5	U	0.07	U	5	U	0.07	U	0.6	J	0.05	U
Calcium, Total	7440-70-2	-	ug/L	204000		--		320000		--		259000		--		112000		--		205000		--	
Chromium, Total	7440-47-3	50	ug/L	10	U	0.9	U	1	U	1.48	U	1	U	0.77	U	1	U	0.29	U	1	U	0.64	U
Cobalt, Total	7440-48-4	-	ug/L	2	J	--		5	U	--		5	U	--		5	U	--		1.1	J	--	
Copper, Total	7440-50-8	200	ug/L	10	U	--		10	U	--		10	U	--		10	U	--		1	J	--	
Iron, Total	7439-89-6	300	ug/L	5590		--		9020		--		10300		--		10300		--		12400		--	
Lead, Total	7439-92-1	25	ug/L	10	U	1	U	10	U	1.73		10	U	0.84	U	1	U	0.83	U	25.4		8.52	
Magnesium, Total	7439-95-4	35000	ug/L	37400		--		25800		--		32900		--		18200		--		26000	J	--	
Manganese, Total	7439-96-5	300	ug/L	1625		--		2570		--		1126		--		824.2		--		681.3		--	
Mercury, Total	7439-97-6	0.7	ug/L	0.2	U	0.1	U	0.2	U	0.1	U	0.2	U	0.1	U	0.2	U	0.1	U	0.2	U	0.1	U
Nickel, Total	7440-02-0	100	ug/L	2.1	J	--		5	U	--		5	U	--		5	U	--		5	U	--	
Potassium, Total	7440-09-7	-	ug/L	15600		--		12700		--		8440		--		3160		--		11800		--	
Selenium, Total	7782-49-2	10	ug/L	5	U	0.104	J	5	U	1.83	J	5	U	1.02	J	5	U	0.9	J	5	U	0.85	J
Silver, Total	7440-22-4	50	ug/L	14	J	0.4	U	5	U	0.4	U	1.4	J	0.4	U	5	U	0.4	U	5	U	0.4	U
Sodium, Total	7440-23-5	20000	ug/L	258000		--		205000		--		36600		--		15300		--		27500	J	--	
Vanadium, Total	7440-62-2	-	ug/L	1.4	J	--		50	U	--		2.4	J	--		50	U	--		2.4	J	--	
Zinc, Total	7440-66-6	2000	ug/L	100	U	--		30	U	--		100	U	--		17.4	U	--		171.2		--	
Dissolved Metals - Westborough Lab																							
Aluminum, Dissolved	7429-90-5	-	ug/L	-		-		-		-		-		-		-		-		20	UJ	-	
Antimony, Dissolved	7440-36-0	3	ug/L	-		-		-		-		-		-		-		-		1.3	J	-	
Arsenic, Dissolved	7440-38-2	25	ug/L	-		-		-		-		-		-		-		-		0.6	J	-	
Barium, Dissolved	7440-39-3	1000	ug/L	-		-		-		-		-		-		-		-		115.7	J	-	
Cadmium, Dissolved	7440-43-9	5	ug/L	-		-		-		-		-		-		-		-		0.5	UJ	-	
Calcium, Dissolved	7440-70-2	-	ug/L	-		-		-		-		-		-		-		-		191000	J	-	
Cobalt, Dissolved	7440-48-4	-	ug/L	-		-		-		-		-		-		-		-		0.2	J	-	
Copper, Dissolved	7440-50-8	200	ug/L	-		-		-		-		-		-		-		-		0.2	J	-	
Iron, Dissolved	7439-89-6	300	ug/L	-		-		-		-		-		-		-		-		661	J	-	
Lead, Dissolved	7439-92-1	25	ug/L	-		-		-		-		-		-		-		-		1	UJ	-	
Magnesium, Dissolved	7439-95-4	35000	ug/L	-		-		-		-		-		-		-		-		30900	J	-	
Manganese, Dissolved	7439-96-5	300	ug/L	-		-		-		-		-		-		-		-		549.1	J	-	
Nickel, Dissolved	7440-02-0	100	ug/L	-		-		-		-		-		-		-		-		0.3	J	-	
Potassium, Dissolved	7440-09-7	-	ug/L	-		-		-		-		-		-		-		-		12500	J	-	
Silver, Dissolved	7440-22-4	50	ug/L	-		-		-		-		-		-		-		-		0.3	J	-	
Sodium, Dissolved	7440-23-5	20000	ug/L	-		-		-		-		-		-		-		-		31300	J	-	
Vanadium, Dissolved	7440-62-2	-	ug/L	-		-		-		-		-		-		-		-		5	UJ	-	
Zinc, Dissolved	7440-66-6	2000	ug/L	-		-		-		-		-		-		-		-		7.3	UJ	-	

Compound [1]	CasNum	GWQS/GV [2]	Units	Sample Location, Collection Date, and Laboratory Qualifier																			
				BLIND DUP (MW-1)	Qual	BLIND DUP (MW-3)	Qual	EQUIP BLANK	Qual	EQUIP BLANK	Qual	TRIP BLANK	Qual	TRIP BLANK	Qual
				1/22/2013		8/15/2013		1/22/2013		8/15/2013		1/22/2013		8/15/2013	
Volatile Organics by GC/MS - Westborough Lab															
Acetone	67-64-1	50	ug/L	5	UJ	5	U	5	UJ	5	U	5	UJ	3.6	J
Benzene	71-43-2	1	ug/L	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobenzene	108-90-7	5	ug/L	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
1,2-Dichlorobenzene	95-50-1	3	ug/L	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
1,3-Dichlorobenzene	541-73-1	3	ug/L	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
1,4-Dichlorobenzene	106-46-7	3	ug/L	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
cis-1,2-Dichloroethene	156-59-2	5	ug/L	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
p-Isopropyltoluene	99-87-6	5	ug/L	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
Methyl tert butyl ether	1634-04-4	10	ug/L	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
Semivolatile Organics by GC/MS - Westborough Lab															
4-Chloroaniline	106-47-8	5	ug/L	5	U	5	U	5	U	5	U	-		-	
Acenaphthene	83-32-9	20	ug/L	0.2	U	0.2	U	0.2	U	0.2	U	-		-	
Anthracene	120-12-7	50	ug/L	0.2	U	0.2	U	0.2	U	0.2	U	-		-	
Fluoranthene	206-44-0	50	ug/L	0.2	U	0.2	U	0.2	U	0.2	U	-		-	
Fluorene	86-73-7	50	ug/L	0.06	J	0.2	U	0.2	U	0.2	U	-		-	
2-Methylnaphthalene	91-57-6	-	ug/L	0.2	U	0.2	U	0.2	UJ	0.2	U	-		-	
Naphthalene	91-20-3	10	ug/L	0.2	U	0.2	U	0.2	U	0.2	U	-		-	
Phenanthrene	85-01-8	50	ug/L	0.35		0.2	U	0.2	U	0.2	U	-		-	
Pyrene	129-00-0	50	ug/L	0.2	U	0.2	U	0.2	U	0.2	U	-		-	
Total Metals - Westborough Lab															
Aluminum, Total	7429-90-5	-	ug/L	71	J	--		2	J	--		-		-	
Antimony, Total	7440-36-0	3	ug/L	5	U	--		0.4	J	--		-		-	
Arsenic, Total	7440-38-2	25	ug/L	3.3	J	1.72		0.5	U	0.5	U	-		-	
Barium, Total	7440-39-3	1000	ug/L	146.5		88.18		0.5	U	0.61		-		-	
Cadmium, Total	7440-43-9	5	ug/L	5	U	0.07	U	0.5	U	0.07	J	-		-	
Calcium, Total	7440-70-2	-	ug/L	201000		--		88	J	--		-		-	
Chromium, Total	7440-47-3	50	ug/L	1	U	1.32	U	1	U	0.49	J	-		-	
Cobalt, Total	7440-48-4	-	ug/L	1.9	J	--		0.5	U	--		-		-	
Copper, Total	7440-50-8	200	ug/L	10	U	--		1	U	--		-		-	
Iron, Total	7439-89-6	300	ug/L	5920		--		50	U	--		-		-	
Lead, Total	7439-92-1	25	ug/L	1	U	0.85	U	1	U	0.28	J	-		-	
Magnesium, Total	7439-95-4	35000	ug/L	38500		--		100	U	--		-		-	
Manganese, Total	7439-96-5	300	ug/L	1743		--		0.9		--		-		-	
Mercury, Total	7439-97-6	0.7	ug/L	0.2	U	0.1	U	0.2	U	0.1	J	-		-	
Nickel, Total	7440-02-0	100	ug/L	2	J	--		0.5	U	--		-		-	
Potassium, Total	7440-09-7	-	ug/L	14900		--		100	U	--		-		-	
Selenium, Total	7782-49-2	10	ug/L	5	U	1.18	J	5	U	5	U	-		-	
Silver, Total	7440-22-4	50	ug/L	5	U	0.4	U	0.5	U	0.4	U	-		-	
Sodium, Total	7440-23-5	20000	ug/L	259000		--		98	J	--		-		-	
Vanadium, Total	7440-62-2	-	ug/L	50	U	--		5	U	--		-		-	
Zinc, Total	7440-66-6	2000	ug/L	100	U	--		11.7		--		-		-	
Dissolved Metals - Westborough Lab															
Aluminum, Dissolved	7429-90-5	-	ug/L	-		-		10	U	-		-		-	
Antimony, Dissolved	7440-36-0	3	ug/L	-		-		1.3	J	-		-		-	
Arsenic, Dissolved	7440-38-2	25	ug/L	-		-		1.3	J	-		-		-	
Barium, Dissolved	7440-39-3	1000	ug/L	-		-		0.5	U	-		-		-	
Cadmium, Dissolved	7440-43-9	5	ug/L	-		-		0.5	U	-		-		-	
Calcium, Dissolved	7440-70-2	-	ug/L	-		-		100	U	-		-		-	
Cobalt, Dissolved	7440-48-4	-	ug/L	-		-		0.5	U	-		-		-	
Copper, Dissolved	7440-50-8	200	ug/L	-		-		1	U	-		-		-	
Iron, Dissolved	7439-89-6	300	ug/L	-		-		50	U	-		-		-	
Lead, Dissolved	7439-92-1	25	ug/L	-		-		1	U	-		-		-	
Magnesium, Dissolved	7439-95-4	35000	ug/L	-		-		100	U	-		-		-	
Manganese, Dissolved	7439-96-5	300	ug/L	-		-		0.5	U	-		-		-	
Nickel, Dissolved	7440-02-0	100	ug/L	-		-		0.5	U	-		-		-	
Potassium, Dissolved	7440-09-7	-	ug/L	-		-		100	U	-		-		-	
Silver, Dissolved	7440-22-4	50	ug/L	-		-		0.5	U	-		-		-	
Sodium, Dissolved	7440-23-5	20000	ug/L	-		-		116		-		-		-	
Vanadium, Dissolved	7440-62-2	-	ug/L	-		-		5	U	-		-		-	
Zinc, Dissolved	7440-66-6	2000	ug/L	-		-		10.9		-		-		-	

Notes:

1. Only compounds detected with reporting limits that exceed the corresponding regulatory standard in at least one sample are included on the summary sheets.
2. NYS Ambient Water Quality Class GA Groundwater Quality Standards/Guidance Values; NYSDEC June 1998 Division of Water Technical and Operational Guidance Series (TOGS) 1.1.1

Qualifier Key:

J = Estimated value. The target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
U = Not detected at the reported detection limit for the sample.
UJ = The analyte was not detected. The associated reported quantitation limit is an estimate and may be inaccurate or imprecise.

Color Code:

= concentration exceeds the individual GWQS/GV.
= Third party validator change/addition.

BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC

TABLE 2B

PRE-REMEDIAL GROUNDWATER CONTAMINATION SUMMARY
SUPPLEMENTAL REMEDIAL INVESTIGATION

Site Management Plan
154 South Ogden Street Site
Buffalo, New York

Compound [1]	CasNum	GWQS/GV [2]	Units	Sample Location, Collection Date, and Laboratory Qualifier																							
				TW-1 2/9/2012	Qual	TW-2 2/9/2012	Qual	TW-3 2/10/2012	Qual	MW-2 1/22/2013	Qual	MW-2 8/15/2013	Qual	TW-04 3/13/2013	Qual	TW-05 3/13/2013	Qual	MW-4 1/22/2013	Qual	MW-4 8/15/2013	Qual	TW-06 3/13/2013	Qual	TW-07 3/13/2013	Qual	TW-08 3/13/2013	Qual
Volatile Organics by GC/MS - Westborough Lab																											
Acetone	67-64-1	50	ug/L	4.2	J	10	U	10	U	5	UJ	5	U	5	U	5	U	10	UJ	5	U	5	U	5	U	5	U
Benzene	71-43-2	1	ug/L	1	U	1	U	**1.2**		0.3	J	0.5	U	0.5	U	0.5	U	1	U	0.5	U	0.5	U	0.5	U	0.34	J
2-Butanone	78-93-3	50	ug/L	1.3	J	10	U	1.3	J	5	U	5	U	5	U	5	U	10	U	5	U	5	U	5	U	1	J
Carbon disulfide	75-15-0	60	ug/L	1	U	1	U	1	U	5	U	5	U	5	U	3.3	J	10	U	2.5	U	5	U	5	U	1.8	J
Chlorobenzene	108-90-7	5	ug/L	1	U	**6.3**		0.78	J	**24**		**9.8**		2.5	U	2.5	U	5	U	2.5	U	2.5	U	2.5	U	2.5	U
1,2-Dichlorobenzene	95-50-1	3	ug/L	1	U	2.1		1	U	**8.3**		**3.3**		2.5	U	2.5	U	5	U	2.5	U	2.5	U	2.5	U	2.5	U
1,3-Dichlorobenzene	541-73-1	3	ug/L	1	U	1	U	1	U	0.74	J	2.5	U	2.5	U	2.5	U	5	U	2.5	U	2.5	U	2.5	U	2.5	U
1,4-Dichlorobenzene	106-46-7	3	ug/L	1	U	1	U	1	U	1.5	J	0.72	J	2.5	U	2.5	U	5	U	2.5	U	2.5	U	2.5	U	2.5	U
cis-1,2-Dichloroethene	156-59-2	5	ug/L	1	U	1	U	1	U	2.5	U	2.5	U	2.5	U	2.5	U	**75**		**9.4**		2.5	U	2.5	U	2.5	U
Cyclohexane	--	--	ug/L	1	U	1	U	3.2		10	U	10	U	NA		NA		20	U	10	U	NA		NA		NA	
Ethylbenzene	100-41-4	5	ug/L	1	U	1	U	1.6		2.5	U	2.5	U	2.5	U	2.5	U	5	U	2.5	U	2.5	U	2.5	U	2.5	U
Isopropylbenzene	98-82-8	5	ug/L	1	U	1	U	**25**		2.5	U	2.5	U	2.5	U	2.5	U	5	U	2.5	U	2.5	U	2.5	U	2.5	U
Methyl tert butyl ether	1634-04-4	10	ug/L	1	U	1	U	1	U	0.86	J	2.5	U	2.5	U	2.5	U	5	U	2.5	U	0.93	J	2.5	U	2.5	U
Methylcyclohexane	--	--	ug/L	1	U	1	U	11		10	U	10	U	NA		NA		20	U	10	U	NA		NA		NA	
Methylene chloride	75-09-2	5	ug/L	1.3		0.59	J	1	U	2.5	U	2.5	U	2.5	U	2.5	U	5	U	2.5	U	2.5	U	2.5	U	2.5	U
Toluene	108-88-3	5	ug/L	1	U	1	U	0.54	J	2.5	U	2.5	U	2.5	U	2.5	U	5	U	2.5	U	2.5	U	5	U	2.5	U
Xylenes, total	--	15	ug/L	2	U	2	U	6		2.5	U	2.5	U	2.5	U	2.5	U	5	U	2.5	U	2.5	U	2.5	U	2.5	U

Notes:

1. Only compounds detected with reporting limits that exceed the corresponding regulatory standard in at least one sample are included on the summary sheets.
2. NYS Ambient Water Quality Class GA Groundwater Quality Standards/Guidance Values; NYSDEC June 1998 Division of Water Technical and Operational Guidance Series (TOGS) 1.1.1

NA = Not Analyzed for this parameter

Qualifier Key:

J = Estimated value. The target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses.
U = Not detected at the reported detection limit for the sample.
UJ = The analyte was not detected. The associated reported quantitation limit is an estimate and may be inaccurate or imprecise.

Color Code:

= concentration exceeds the individual GWQS/GV.
= Third party validator change/addition.

BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC

TABLE 3

POST-REMEDIAL SOIL VAPOR DATA SUMMARY

Site Management Plan
154 South Ogden Street Site
Buffalo, New York

Compound [1]	CasNum	Units	Sample Location, Collection Date, and Laboratory Qualifier									
			ASD-2 6/18/2014	Qual	ASD-3 6/18/2014	Qual	ASD-4 6/18/2014	Qual	ASD-5 6/18/2014	Qual	AMBIENT #1 6/18/2014	Qual
Volatile Organic Compounds - TO-15												
1,1,1-Trichloroethane	71-55-6	ug/m3	10.9	U	10.9	U	3.21	U	5.46	U	1.09	U
1,1-Dichloroethene	75-35-4	ug/m3	7.93	U	7.93	U	2.34	U	3.96	U	0.793	U
2,2,4-Trimethylpentane	540-84-1	ug/m3	9.34	U	9.34	U	3.05		4.67	U	0.934	U
2-Butanone	78-93-3	ug/m3	422		21.5		24.1		628		0.876	
Acetone	67-64-1	ug/m3	1300		651		696		1890		8.58	
Benzene	71-43-2	ug/m3	6.39	U	6.39	U	4.22		4.15		0.639	U
Carbon disulfide	75-15-0	ug/m3	6.23	U	6.23	U	2.99		4.08		0.623	U
Carbon tetrachloride	56-23-5	ug/m3	12.6	U	12.6	U	3.71	U	6.29	U	1.26	U
Chloromethane	74-87-3	ug/m3	4.13	U	4.13	U	7.83		2.07	U	1.46	
cis-1,2-Dichloroethene	156-59-2	ug/m3	7.93	U	7.93	U	2.34	U	3.96	U	0.793	U
Cyclohexane	110-82-7	ug/m3	6.88	U	6.88	U	2.45		3.44	U	0.688	U
Dichlorodifluoromethane	75-71-8	ug/m3	9.89	U	9.89	U	2.91	U	4.94	U	2.43	
Ethanol	64-17-5	ug/m3	71.6		47.1	U	59.7		110		4.71	U
Heptane	142-82-5	ug/m3	8.2	U	8.2	U	2.61		4.1	U	0.82	U
Isopropanol	67-63-0	ug/m3	12.3	U	12.3	U	7.2		10.3		1.23	U
Methylene chloride	75-09-2	ug/m3	34.7	U	34.7	U	38.9		17.4	U	3.47	U
n-Hexane	110-54-3	ug/m3	7.05	U	7.05	U	4.97		3.52	U	0.705	U
Tertiary butyl Alcohol	75-65-0	ug/m3	83.7		52.1		289		229		1.52	U
Tetrachloroethene	127-18-4	ug/m3	13.6	U	13.6	U	3.99	U	6.78	U	1.36	U
Tetrahydrofuran	109-99-9	ug/m3	1370		1940		584		805		0.59	U
Toluene	108-88-3	ug/m3	9.08		10		5.62		4		0.754	U
Trichloroethene	79-01-6	ug/m3	10.7	U	10.7	U	3.17	U	5	U	1.07	U
Trichlorofluoromethane	75-69-4	ug/m3	11.2	U	11.2	U	3.31	U	5.6	U	1.92	
Vinyl chloride	75-01-4	ug/m3	5.11	U	5.11	U	1.51	U	2.6	U	0.511	U

Notes:

1. Only compounds detected with reporting limits that exceed the corresponding regulatory standard in at least one sample are included on the table.

Qualifier Key:

U = Not detected at the reported detection limit for the sample.

Color Code:

blue = one of seven compounds regulated by the NYSDOH Guidance for Evaluating Soil Vapor Intrusion in the State of New York (October 2006 / June 2007).

BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC

TABLE 4

Restricted Use Soil Cleanup Objectives

Site Management Plan
154 South Ogden Street Site
Buffalo, New York

Contaminant	CAS Number	Protection of Public Health (ppm)				Protection of Ecological Resources (ppm)	Protection of Groundwater (ppm)	Footnote(s)
		Residential	Restricted-Residential	Commercial	Industrial			
Volatile Organic Compounds (VOCs)								
1,1,1-Trichloroethane	71-55-6	100	100	500	**1,000**	NS	0.68	a, b, c
1,1-Dichloroethane	75-34-3	19	26	240	**480**	NS	0.27	
1,1-Dichloroethene	75-35-4	100	100	500	**1,000**	NS	0.33	a, b, c
1,2-Dichlorobenzene	95-50-1	100	100	500	**1,000**	NS	1.1	a, b, c
1,2-Dichloroethane	107-06-2	2.3	3.1	30	**60**	10	0.02	f
cis-1,2-Dichloroethene	156-59-2	59	100	500	**1,000**	NS	0.25	a, b, c
trans-1,2-Dichloroethene	156-60-5	100	100	500	**1,000**	NS	0.19	a, b, c
1,3-Dichlorobenzene	541-73-1	17	49	280	**560**	NS	2.4	
1,4-Dichlorobenzene	106-46-7	9.8	13	130	**250**	20	1.8	
1,4-Dioxane	123-91-1	9.8	13	130	**250**	0.1	0.1	e
Acetone	67-64-1	100	100	500	**1,000**	2.2	0.05	a, b, c
Benzene	71-43-2	2.9	4.8	44	**89**	70	0.06	
Butylbenzene	104-51-8	100	100	500	**1,000**	NS	12	a, b, c
Carbon tetrachloride	56-23-5	1.4	2.4	22	**44**	NS	0.76	
Chlorobenzene	108-90-7	100	100	500	**1,000**	40	1.1	a, b, c
Chloroform	67-66-3	10	49	350	**700**	12	0.37	
Ethylbenzene	100-41-4	30	41	390	**780**	NS	1	
Hexachlorobenzene	118-74-1	0.33	1.2	6	**12**	NS	3.2	e
Methyl ethyl ketone	78-93-3	100	100	500	**1,000**	100	0.12	a, b, c
Methyl tert-butyl ether	1634-04-4	62	100	500	**1,000**	NS	0.93	a, b, c
Methylene chloride	75-09-2	51	100	500	**1,000**	12	0.05	a, b, c
n-Propylbenzene	103-65-1	100	100	500	**1,000**	NS	3.9	a, b, c
sec-Butylbenzene	135-98-8	100	100	500	**1,000**	NS	11	a, b, c
tert-Butylbenzene	98-06-6	100	100	500	**1,000**	NS	5.9	a, b, c
Tetrachloroethene	127-18-4	5.5	19	150	**300**	2	1.3	
Toluene	108-88-3	100	100	500	**1,000**	36	0.7	a, b, c
Trichloroethene	79-01-6	10	21	200	**400**	2	0.47	
1,2,4-Trimethylbenzene	95-63-6	47	52	190	**380**	NS	3.6	
1,3,5- Trimethylbenzene	108-67-8	47	52	190	**380**	NS	8.4	
Vinyl chloride	75-01-4	0.21	0.9	13	**27**	NS	0.02	
Xylene (mixed)	1330-20-7	100	100	500	**1,000**	0.26	1.6	a, b, c
Semi-Volatile Organic Compounds (SVOCs)								
Acenaphthene	83-32-9	100	100	500	**1,000**	20	98	a, b, c
Acenapthylene	208-96-8	100	100	500	**1,000**	NS	107	a, b, c
Anthracene	120-12-7	100	100	500	**1,000**	NS	1,000	a, b, c
Benz(a)anthracene	56-55-3	1	1	5.6	**11**	NS	1	f
Benzo(a)pyrene	50-32-8	1	1	1	**1.1**	2.6	22	f

BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC

TABLE 4

Restricted Use Soil Cleanup Objectives

Site Management Plan
154 South Ogden Street Site
Buffalo, New York

Contaminant	CAS Number	Protection of Public Health (ppm)				Protection of Ecological Resources (ppm)	Protection of Groundwater (ppm)	Footnote(s)
		Residential	Restricted-Residential	Commercial	Industrial			
Benzo(b)fluoranthene	205-99-2	1	1	5.6	**11**	NS	1.7	f
Benzo(g,h,i)perylene	191-24-2	100	100	500	**1,000**	NS	1,000	a, b, c
Benzo(k)fluoranthene	207-08-9	1	3.9	56	**110**	NS	1.7	
Chrysene	218-01-9	1	3.9	56	**110**	NS	1	f
Dibenz(a,h)anthracene	53-70-3	0.33	0.33	0.56	**1.1**	NS	1,000	c, e
Fluoranthene	206-44-0	100	100	500	**1,000**	NS	1,000	a, b, c
Fluorene	86-73-7	100	100	500	**1,000**	30	386	a, b, c
Indeno(1,2,3-cd)pyrene	193-39-5	0.5	0.5	5.6	**11**	NS	8.2	f
m-Cresol	108-39-4	100	100	500	**1,000**	NS	0.33	a, b, c, e
Naphthalene	91-20-3	100	100	500	**1,000**	NS	12	a, b, c
o-Cresol	95-48-7	100	100	500	**1,000**	NS	0.33	a, b, c, e
p-Cresol	106-44-5	34	100	500	**1,000**	NS	0.33	a, b, c, e
Pentachlorophenol	87-86-5	2.4	6.7	6.7	**55**	0.8	0.8	e
Phenanthrene	85-01-8	100	100	500	**1,000**	NS	1,000	a, b, c
Phenol	108-95-2	100	100	500	**1,000**	30	0.33	a, b, c, e
Pyrene	129-00-0	100	100	500	**1,000**	NS	1,000	a, b, c
PCBs/Pesticides								
2,4,5-TP Acid (Silvex)	93-72-1	58	100	500	**1,000**	NS	3.8	a, b, c
4,4'-DDE	72-55-9	1.8	8.9	62	**120**	0.0033	17	e
4,4'-DDT	50-29-3	1.7	7.9	47	**94**	0.0033	136	e
4,4'- DDD	72-54-8	2.6	13	92	**180**	0.0033	14	e
Aldrin	309-00-2	0.019	0.097	0.68	**1.4**	0.14	0.19	
alpha-BHC	319-84-6	0.097	0.48	3.4	**6.8**	0.04	0.02	g
beta-BHC	319-85-7	0.072	0.36	3	**14**	0.6	0.09	
Chlordane (alpha)	5103-71-9	0.91	4.2	24	**47**	1.3	2.9	
delta-BHC	319-86-8	100	100	500	**1,000**	0.04	0.25	a, b, c, g
Dibenzofuran	132-64-9	14	59	350	**1,000**	NS	210	c
Dieldrin	60-57-1	0.039	0.2	1.4	**2.8**	0.006	0.1	
Endosulfan I	959-98-8	4.8	24	200	**920**	NS	102	i
Endosulfan II	33213-65-9	4.8	24	200	**920**	NS	102	i
Endosulfan sulfate	1031-07-8	4.8	24	200	**920**	NS	1,000	c, i
Endrin	72-20-8	2.2	11	89	**410**	0.014	0.06	
Heptachlor	76-44-8	0.42	2.1	15	**29**	0.14	0.38	
Lindane	58-89-9	0.28	1.3	9.2	**23**	6	0.1	
Polychlorinated biphenyls (PCBs)	1336-36-3	1	1	1	**25**	1	3.2	
Metals								
Arsenic	7440-38-2	16	16	16	**16**	13	16	f
Barium	7440-39-3	350	400	400	**10,000**	433	820	d, f

BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC

TABLE 4

Restricted Use Soil Cleanup Objectives

Site Management Plan
154 South Ogden Street Site
Buffalo, New York

Contaminant	CAS Number	Protection of Public Health (ppm)				Protection of Ecological Resources (ppm)	Protection of Groundwater (ppm)	Footnote(s)
		Residential	Restricted-Residential	Commercial	Industrial			
Beryllium	7440-41-7	14	72	590	**2700**	10	47	
Cadmium	7440-43-9	2.5	4.3	9.3	**60**	4	7.5	f
Chromium, hexavalent	18540-29-9	22	110	400	**800**	1	19	e, h
Chromium, trivalent	16065-83-1	36	180	1500	**6800**	41	NS	h
Copper	7440-50-8	270	270	270	**10,000**	50	1720	d
Cyanide, Total	74-90-8	27	27	27	**10,000**	NS	40	d, h
Lead	7439-92-1	400	400	1000	**3900**	63	450	f
Manganese	7439-96-5	2,000	2,000	10,000	**10,000**	1,600	2,000	d, f
Mercury, Total	7439-97-6	0.81	0.81	2.8	**5.7**	0.18	0.73	f, j
Nickel	7440-02-0	140	310	310	**10,000**	30	130	d
Selenium	7782-49-2	36	180	1,500	**6,800**	3.9	4	f
Silver	7440-22-4	36	180	1,500	**6,800**	2	8.3	
Zinc	7440-66-6	2,200	10,000	10,000	**10,000**	109	2,480	d, f

Notes:

Information presented in this table is taken from NYSDEC Part 375 Table 375-6.8(b).
All soil cleanup objectives (SCOs) are in parts per million (ppm).
NS=Not specified. See Technical Support Document (TSD).
ppm = parts per million (or mg/L, or mg/kg)

Footnotes

a The SCOs for residential, restricted-residential and ecological resources use were capped at a maximum value of 100 ppm. See TSD section 9.3.
b The SCOs for commercial use were capped at a maximum value of 500 ppm. See TSD section 9.3.
c The SCOs for industrial use and the protection of groundwater were capped at a maximum value of 1000 ppm. See TSD section 9.3.
d The SCOs for metals were capped at a maximum value of 10,000 ppm. See TSD section 9.3.
e For constituents where the calculated SCO was lower than the contract required quantitation limit (CRQL), the CRQL is used as the SCO value.
f For constituents where the calculated SCO was lower than the rural soil background concentration as determined by the Department and Department of Health rural soil survey, the rural soil background concentration is used as the Track 2 SCO value for this use of the site.
g The Protection of Ecological Resources SCO is derived from data on mixed isomers of BHC.
h The SCO for this specific compound (or family of compounds) is considered to be met if the analysis for the total species of this contaminant is below the specific SCO.
i The R, RR, C, and I SCO is for the sum of endosulfan I, endosulfan II, and endosulfan sulfate.
j This SCO is the lower of the values for mercury (elemental) or mercury (inorganic salts). See TSD Table 5.6-1.

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TABLE 5A

SUMMARY OF POST-REMEDIAL SOIL/FILL CONTAMINATION ABOVE UNRESTRICTED SCOs
REMEDIAL INVESTIGATION

Site Management Plan
154 South Ogden Street Site
Buffalo, New York

Compound [1]	CasNum	USCO [2]	Units	Sample Location, Collection Date, and Laboratory Qualifier																											
				SB-9 (4-6) 1/16/2013	Qual	SB-10 (6-8) 1/3/2013	Qual	SB-11 (8-10) 1/15/2013	Qual	SB-12 (10-12) 1/15/2013	Qual	SB-13 (4-5.8) 1/3/2013	Qual	SB-15 (0-2) 1/16/2013	Qual	SB-15 (2-4) 1/16/2013	Qual	SB-17 (0-2) 1/4/2013	Qual	SB-17 (6-8) 1/4/2013	Qual	SB-18 (2-4) 1/15/2013	Qual	SB-19 (0-2) 1/15/2013	Qual	SB-19 (8-10) 1/15/2013	Qual	SB-21 (2-4) 1/7/2013	Qual	SB-22 (2-4) 1/7/2013	Qual	SB-23 (0-2) 1/4/2013	Qual
General Chemistry																															
Solids, Total	NONE	--	%	83		84		77		87		81		83		81		84		87		85		89		89		80		81		74	
Volatile Organics by 8260C/5035																															
Acetone	67-64-1	0.05	mg/kg	0.01	U	0.011	U	0.038	J	0.06		0.017	U	0.018	U	0.016	U	0.013	U	0.011	UJ	0.015	U	0.014	U	0.02	J	0.024	U	0.019	U	0.012	UJ
2-Butanone	78-93-3	0.12	mg/kg	0.01	U	0.011	U	0.032	U	0.014		0.017	U	0.018	U	0.016	U	0.013	U	0.011	UJ	0.015	U	0.014	U	0.018	U	0.024	U	0.019	U	0.012	UJ
Carbon Disulfide	75-15-0	--	mg/kg	0.01	U	0.011	U	0.032	U	0.012	U	0.017	U	0.018	U	0.016	U	0.013	U	0.011	U	0.015	U	0.014	U	0.018	U	0.024	U	0.019	U	0.012	U
Cyclohexane	110-82-7	--	mg/kg	0.02	U	0.022	U	0.065	U	0.025	U	0.00043	J	0.036	U	0.032	U	0.026	U	0.022	U	0.00074	J	0.027	U	0.0003	J	0.048	U	0.038	U	0.024	U
Ethylbenzene	100-41-4	1	mg/kg	0.001	U	0.0011	U	0.0032	U	0.0012	U	0.0017	U	0.0018	U	0.0016	U	0.0013	U	0.0011	U	0.0015	U	0.0014	U	0.0018	U	0.0024	U	0.0019	U	0.0012	U
p-Isopropyltoluene	99-87-6	--	mg/kg	0.001	U	0.0011	U	0.0032	U	0.0012	U	0.0017	U	0.0018	U	0.0016	U	0.0013	U	0.0011	U	0.0015	U	0.0014	U	0.0018	U	0.0024	U	0.0019	U	0.0012	U
Methyl cyclohexane	108-87-2	--	mg/kg	0.004	U	0.0043	U	0.013	U	0.005	U	0.0067	U	0.0073	U	0.0065	U	0.0052	U	0.0044	U	0.001	J	0.0055	U	0.0072	U	0.0096	U	0.0077	U	0.0048	U
Methylene chloride	75-09-2	0.05	mg/kg	0.01	U	0.011	U	0.032	U	0.0034	J	0.017	U	0.018	U	0.016	U	0.013	U	0.011	U	0.015	U	0.0042	J	0.0058	J	0.024	U	0.019	U	0.012	U
Toluene	108-88-3	0.7	mg/kg	0.0015	U	0.0011	U	0.0049	U	0.0019	U	0.0025	U	0.0027	U	0.0024	U	0.002	U	0.0016	U	0.0023	U	0.002	U	0.0018	J	0.0036	U	0.0029	U	0.0018	U
Semivolatile Organics by 8270D																															
2-Methylnaphthalene	91-57-6	--	mg/kg	0.2	J	1.2	U	0.26	U	0.22	U	0.24	U	0.24	U	0.1	J	0.22	J	0.22	U	0.23	U	1.1	U	6.7	U	0.25	U	0.24	U	2.7	U
3-Methylphenol/4-Methylphenol	108-39-4 / 106-44-5	0.33	mg/kg	0.29	U	1.4	U	0.31	U	0.27	U	0.29	U	0.28	U	0.29	U	0.56	U	0.27	U	0.28	U	1.3	U	8	U	0.3	U	0.29	U	3.2	U
Acenaphthene	83-32-9	20	mg/kg	0.67		0.77	U	0.17	U	0.13	J	0.16	U	0.16	U	0.16	U	0.62	J	0.15	U	0.15	U	1.1		4.4	U	0.16	U	0.16	U	1.8	U
Acenaphthylene	208-96-8	100	mg/kg	0.23		0.77	U	0.17	U	0.15	U	0.16	U	0.16	U	0.16	U	0.31	UJ	0.15	U	0.15	U	0.74	U	4.4	U	0.16	U	0.16	U	1.8	U
Anthracene	120-12-7	100	mg/kg	2		0.41	J	0.086	J	0.26		0.12	U	0.12	U	0.068	J	1.1	J	0.11	U	0.11	U	2.3		3	J	0.12	U	0.12	U	1.3	U
Benzo(a)anthracene	56-55-3	1	mg/kg	3.2		1.2		0.22		0.55		0.057	J	0.12	U	0.25	NJ	3.1	J	0.11	UJ	0.11	U	3.5		10		0.12	U	0.12	U	1.3	U
Benzo(a)pyrene	50-32-8	1	mg/kg	2.8		1.2		0.15	J	0.5		0.051	J	0.16	U	0.22		2.9	J	0.15	UJ	0.15	U	2.8		9.5		0.16	U	0.16	U	1.8	U
Benzo(b)fluoranthene	205-99-2	1	mg/kg	3.9		1.6		0.24		0.65		0.061	J	0.12	U	0.35		4.2	J	0.11	UJ	0.041	J	3.6		12		0.045	J	0.12	U	1.3	U
Benzo(ghi)perylene	191-24-2	100	mg/kg	1.6		0.65	J	0.11	J	0.33		0.16	U	0.16	U	0.18		1.6	J	0.15	U	0.15	U	1.5		6		0.16	U	0.16	U	1.8	U
Benzo(k)fluoranthene	207-08-9	0.8	mg/kg	1.2		0.49	J	0.088	J	0.24		0.034	J	0.12	U	0.15		1.5	J	0.11	U	0.11	U	1.5		4.6		0.12	U	0.12	U	1.3	U
Benzoic Acid	65-85-0	--	mg/kg	0.64	U	3.1	U	0.7	U	0.6	U	0.66	U	0.64	U	0.66	U	1.2	U	0.6	U	0.62	U	3	U	18	U	0.66	U	0.65	U	7.2	U
Benzyl Alcohol	100-51-6	--	mg/kg	0.2	U	0.97	U	0.22	U	0.19	U	0.2	U	0.2	U	0.2	U	0.39	U	0.18	U	0.19	U	0.92	U	5.6	U	0.2	U	0.2	U	2.2	U
Bis(2-Ethylhexyl)phthalate	117-81-7	--	mg/kg	0.2	U	0.97	U	0.22	U	0.19	U	0.2	U	0.2	U	0.2	U	0.39	U	0.18	U	0.19	U	0.92	U	5.6	U	0.2	U	0.2	U	2.2	U
Butyl benzyl phthalate	85-68-7	--	mg/kg	0.2	U	0.97	U	0.22	U	0.19	U	0.2	U	0.2	U	0.2	U	0.39	U	0.18	U	0.19	U	0.92	U	5.6	U	0.2	U	0.2	U	2.2	U
Carbazole	86-74-8	--	mg/kg	0.78		0.18	J	0.052	J	0.16	J	0.2	U	0.2	U	0.047	J	1.1	J	0.18	U	0.19	U	1.2		5.6	U	0.2	U	0.2	U	2.2	U
Chrysene	218-01-9	1	mg/kg	3		1.1		0.21		0.55		0.055	J	0.12	U	0.3		3.5	J	0.11	UJ	0.039	J	3.2		10		0.043	J	0.12	U	1.3	U
Di-n-butylphthalate	84-74-2	--	mg/kg	0.2	U	0.97	U	0.22	U	0.19	U	0.2	U	0.2	U	0.2	U	0.39	U	0.18	U	0.19	U	0.92	U	5.6	U	0.2	U	0.2	U	2.2	U
Dibenzo(a,h)anthracene	53-70-3	0.33	mg/kg	0.37		0.58	U	0.13	U	0.067	J	0.12	U	0.12	U	0.041	J	0.44	J	0.11	U	0.11	U	0.39	J	1.5	J	0.12	U	0.12	U	1.3	U
Dibenzofuran	132-64-9	7	mg/kg	0.62		0.97	U	0.22	U	0.081	J	0.2	U	0.2	U	0.048	J	0.53	J	0.18	U	0.19	U	0.84	J	5.6	U	0.2	U	0.2	U	2.2	U
Fluoranthene	206-44-0	100	mg/kg	8.6	D	2.7		0.48		1.5		0.12		0.12	U	0.58		10	J	0.11	UJ	0.054	J	7.5		22		0.061	J	0.12	U	0.53	J
Fluorene	86-73-7	30	mg/kg	1		0.97	U	0.047	J	0.16	J	0.2	U	0.2	U	0.2	U	0.76	J	0.18	U	0.19	U	1.3		1.1	J	0.2	U	0.2	U	2.2	U
Hexachlorobenzene	118-74-1	0.33	mg/kg	0.12	U	0.58	U	0.13	U	0.11	U	0.12	U	0.12	U	0.12	U	0.23	U	0.11	U	0.11	U	0.55	U	3.3	U	0.12	U	0.12	U	1.3	U
Indeno(1,2,3-cd)Pyrene	193-39-5	0.5	mg/kg	1.9		0.64	J	0.11	J	0.32		0.16	U	0.16	U	0.2		2.1	J	0.15	U	0.15	U	1.7		6		0.16	U	0.16	U	1.8	U
Naphthalene	91-20-3	12	mg/kg	0.31		0.97	U	0.22	U	0.091	J	0.2	U	0.2	U	0.089	J	0.34	J	0.18	U	0.19	U	0.48	J	5.6	U	0.2	U	0.2	U	2.2	U
Phenanthrene	85-01-8	100	mg/kg	7.4		1.6		0.4		1.3		0.09	J	0.12	U	0.38		7.5	J	0.11	UJ	0.041	J	8		12		0.12	U	0.12	U	0.4	J
Phenol	108-95-2	0.33	mg/kg	0.2	U	0.97	U	0.22	U	0.19	U	0.2	U	0.2	U	0.2	U	0.39	U	0.18	U	0.19	U	0.92	U	5.6	U	0.2	U	0.2	U	2.2	U
Pyrene	129-00-0	100	mg/kg	7		2.2		0.38		1.2		0.098	J	0.12	U	0.44		7.4	J	0.11	UJ	0.041	J	5.4		19		0.049	J	0.12	U	0.44	J
Total PAHs (CP-51) [3]		**500**	**mg/kg**	**45.18**		**13.79**		**2.521**		**7.848**		**0.566**		**ND**		**3.248**		**47.06**		**ND**		**0.216**		**44.27**		**116.7**		**0.198**		**ND**		**1.37**	
Organochlorine Pesticides by 8081B																															
4,4'-DDD	72-54-8	0.0033	mg/kg	0.00187	UJ	0.00226	J	0.00655	UJ	0.00971	J	0.00267	J	0.00184	UJ	0.00186	UJ	0.00181	UJ	0.00177	UJ	0.00901	UJ	0.00176	UJ	0.0228	NJ	0.00189	UJ	0.00192	UJ	0.00211	UJ
4,4'-DDE	72-55-9	0.0033	mg/kg	0.00187	UJ	0.00411		0.00988	UJ	0.009	UJ	0.00185	UJ	0.000797	J	0.00327	J	0.0045	NJ	0.00177	UJ	0.00901	UJ	0.00176	UJ	0.0147	J	0.00189	UJ	0.00192	UJ	0.00409	J
4,4'-DDT	50-29-3	0.0033	mg/kg	0.00351	UJ	0.0103	J	0.0185	UJ	0.00858	J	0.00247	J	0.00345	UJ	0.00315	UJ	0.0111	J	0.00331	UJ	0.00852	J	0.00331	UJ	0.0657	NJ	0.00354	UJ	0.00361	UJ	0.00287	UJ
Alpha-BHC	319-84-6	0.02	mg/kg	0.00078	UJ	0.000772	UJ	0.00412	UJ	0.00375	UJ	0.000771	UJ	0.000766	UJ	0.000776	UJ	0.000753	UJ	0.000736	UJ	0.00375	UJ	0.000735	UJ	0.000724	UJ	0.000787	UJ	0.000802	UJ	0.00088	UJ
Chlordane	57-74-9	--	mg/kg	0.0152	UJ	0.0151	UJ	0.0803	UJ	0.0731	UJ	0.015	UJ	0.0149	UJ	0.0151	UJ	0.0504	J	0.0144	UJ	0.0732	UJ	0.0143	UJ	0.0141	UJ	0.0153	UJ	0.0156	UJ	0.0172	UJ
cis-Chlordane	5103-71-9	0.094	mg/kg	0.00234	UJ	0.00232	UJ	0.0124	UJ	0.0112	UJ	0.000771	NJ	0.0023	UJ	0.00233	UJ	0.00308	UJ	0.00221	UJ	0.0113	UJ	0.00221	UJ	0.00217	UJ	0.00236	UJ	0.00241	UJ	0.00264	UJ
Dieldrin	60-57-1	0.005	mg/kg	0.00117	UJ	0.00116	UJ	0.00618	UJ	0.00562	UJ	0.00116	UJ	0.00115	UJ	0.00116	UJ	0.00113	UJ	0.0011	UJ	0.00563	UJ	0.0011	UJ	0.00461	NJ	0.00118	UJ	0.0012	UJ	0.00132	UJ
Endrin ketone	53494-70-5	--	mg/kg	0.00187	UJ	0.00185	UJ	0.00988	UJ	0.009	UJ	0.00185	UJ	0.00184	UJ	0.00186	UJ	0.00181	UJ	0.00177	UJ	0.00901	UJ	0.00176	UJ	0.00174	UJ	0.00189	UJ	0.00192	UJ	0.00211	UJ
Heptachlor	76-44-8	0.042	mg/kg	0.000936	UJ	0.000927	UJ	0.00494	UJ	0.0045	UJ	0.000925	UJ	0.00092	UJ	0.000932	UJ	0.000904	UJ	0.000884	UJ	0.0045	UJ	0.000882	UJ	0.000869	UJ	0.000944	UJ	0.000963	UJ	0.00106	UJ
Lindane	58-89-9	0.1	mg/kg	0.00078	UJ	0.000772	UJ	0.00412	UJ	0.00375	UJ	0.000771	UJ	0.000766	UJ	0.000776	UJ	0.000753	UJ	0.000736	UJ	0.00375	UJ	0.000735	UJ	0.000724	UJ	0.000787	UJ	0.000802	UJ	0.00088	UJ
Methoxychlor	72-43-5	--	mg/kg	0.00351	UJ	0.00348	UJ	0.0185	UJ	0.0169	UJ	0.00347	UJ	0.00345	UJ	0.00349	UJ	0.00339	UJ	0.00331	UJ	0.0169	UJ	0.00331	UJ	0.00326	UJ	0.00354	UJ	0.00361	UJ	0.00396	UJ
trans-Chlordane	5103-74-2	--	mg/kg	0.00234	UJ	0.00232	UJ	0.0124	UJ	0.0112	UJ	0.00231	UJ	0.0023	UJ	0.00233	UJ	0.00586	J	0.00221	UJ	0.0113	UJ	0.00221	UJ	0.00217	UJ	0.00236	UJ	0.00241	UJ	0.00264	UJ
Polychlorinated Biphenyls by 8082A																															
Aroclor 1254	11097-69-1	0.1	mg/kg	0.0125	J	0.0386	UJ	0.0421	UJ	0.037	UJ	0.0397	UJ	0.0391	UJ	0.0397	UJ	0.0372	UJ	0.0362	UJ	0.0374	UJ	0.0358	UJ	0.0355	UJ	0.0412	UJ	0.04	UJ	0.0261	J
Aroclor 1260	11096-82-5	0.1	mg/kg	0.0398	UJ	0.0386	UJ	0.0421	UJ	0.037	UJ	0.0397	UJ	0.0391	UJ	0.025	J	0.0161	J	0.0362	UJ	0.0276	J	0.00795	J	0.117	J	0.0412	UJ	0.04	UJ	0.0344	J
Total Metals by 6010C/7471B (Mercury)																															
Aluminum, Total	7429-90-5	--	mg/kg	8500		8900		11000		7200		13000		7900		14000		14000		6200		13000		5400		5900		8000		7800		6000	
Antimony, Total	7440-36-0	--	mg/kg	18	J	3.9	J	3.3	J	2.1	J	3.4	J	1.6	J	4.1	J	4.5	J	1.9	J	2.1	J	4.4	UJ	1.8	J	2.3	J	2.3	J	1.5	J
Arsenic, Total	7440-38-2	13	mg/kg	7.6	J	7.2		7.2		3.8		8		4.5	J	11		8.7		3		6.8		5.8		7.9		6.6		4		3.2	
Barium, Total	7440-39-3	350	mg/kg	94		89		77		50		78		47		110		91		43		97		48		980		68		56		45	
Beryllium, Total	7440-41-7	7.2	mg/kg	0.42	J	0.48		0.56		0.36	J	0.65		0.37	J	0.67		0.7		0.31	J	0.66		0.31	J	0.37	J	0.41	J	0.38	J	0.36	J
Cadmium, Total	7440-43-9	2.5	mg/kg	0.55	J	0.71	J	0.19	J	0.09	J	0.97	U	0.18	J	0.11	J	0.12	J	0.89	U	0.89	U	0.1	J	1.1		0.37	J	0.07	J	0.35	J
Calcium, Total	7440-70-2	--	mg/kg	18000		15000		16000		5200		38000		48000		36000		57000		3400		38000		100000		38000		48000		3900		70000	
Chromium, Total	7440-47-3	--	mg/kg	14		18	J	19	J	9.8	J	19	J	10		23		30	J	9.6	J	19	J	10	J	27	J	14		12		11	J
Cobalt, Total	7440-48-4	--	mg/kg	7.4		8.2		9.7		5.8		11		6.5		12		9.2		5.4		9.6		3.6		4.2		7.8		7.1		3.8	
Copper, Total	7440-50-8	50	mg/kg	33		57	J	30		17		27	J	18		74		41	J	15	J	24		14		82		20		20		39	J
Iron, Total	7439-89-6	--	mg/kg	17000		22000		22000		13000		24000		14000		30000		28000		12000		22000		10000		9200		17000	J	16000	J	11000	
Lead, Total	7439-92-1	63	mg/kg	840	J	220	J	50	J	22	J	53	J	13	J	120		73	J	10	J	24	J	36	J	1600	J	30		10		50	J
Magnesium, Total	7439-95-4	--	mg/kg	6300		6400		7900		3200		13000		5500		15000		13000		2600		9300		10000		6600		12000		3900		10000	
Manganese, Total	7439-96-5	1600	mg/kg	300	J	430		310		240		440		240	J	510		680		240		560		280		200		420		310		250	
Mercury, Total	7439-97-6	0.18	mg/kg	0.23		0.14		0.19	J	0.02	J	0.09	J	0.04	J	0.08		0.28		0.04	J	0.09	J	0.07	J	0.48	J	0.1	U	0.04	J	0.19	
Nickel, Total	7440-02-0	30	mg/kg	22		24		26		16		27		18		34		26		15		26		13		9.2		19		21		11	
Potassium, Total	7440-09-7	--	mg/kg	990		1100	J	1800		900		2300	J	1100		2400		2600	J	700	J	2400		1200		690		1500		590		1400	J
Selenium, Total	7782-49-2	3.9	mg/kg	1.4	J	1.3	J	0.84	J	0.66	J	0.94	J	0.28	J	2.2		2.5		1.1	J	1.1	J	0.58	J	1.2	J	1.4	J	0.95	J	1.5	J
Silver, Total	7440-22-4	2	mg/kg	0.91	U	0.9	U	0.99	U	0.88	U	0.97	U	0.92	U	0.94	U	0.19	J	0.89	U	0.89	U	0.87	U	0.22	J	0.94	U	0.93	U	1	U
Sodium, Total	7440-23-5	--	mg/kg	280		170	J	150	J	240		680		120	J	360		380		110	J	280		130	J	420		240		140	J	250	
Vanadium, Total	7440-62-2	--	mg/kg	17		19		21		14		24		14		25		29		13		25		14		23		20		14		15	
Zinc, Total	7440-66-6	109	mg/kg	190	J	470		120	J	56	J	84		61	J	190		110		45		77	J	57	J	460	J	97		57		110	

BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC

TABLE 5A

SUMMARY OF POST-REMEDIAL SOIL/FILL CONTAMINATION ABOVE UNRESTRICTED SCOs
REMEDIAL INVESTIGATION

Site Management Plan
154 South Ogden Street Site
Buffalo, New York

Compound [1]	CasNum	USCO [2]	Units	Sample Location, Collection Date, and Laboratory Qualifier																											
				SB-23 (4-6) 1/4/2013	Qual	SB-24 (0-2) 1/16/2013	Qual	SB-24 (2-4) 1/16/2013	Qual	SB-25 (10-12') 1/8/2013	Qual	SB-26 (6-8) 1/7/2013	Qual	SB-28 (2-4) 1/14/2013	Qual	SB-29 (2-6) 1/8/2013	Qual	SB-30 (0-2) 1/8/2013	Qual	SB-30 (2-6) 1/8/2013	Qual	SB-31 (2-4) 1/11/2013	Qual	SB-32 (2-4) 1/11/2013	Qual	SB-33 (10-12) 1/14/2013	Qual	MS/MSD SB-34 (0-2) 1/14/2013	Qual	MS/MSD SB-34 (4-5.5) 1/14/2013	Qual	SB-35 (10-12) 1/11/2013	Qual
General Chemistry																															
Solids, Total	NONE	--	%	82		85		83		74		90		83		86		81		81		77		72		82		81		72		69	
Volatile Organics by 8260C/5035																															
Acetone	67-64-1	0.05	mg/kg	0.0049	J	0.0066	J	0.012	U	0.014		0.0088	U	0.012	U	0.06		0.0042	J	0.71	U	0.011	U	0.027	U	0.011	J	0.0061	J	0.019	U	0.049	
2-Butanone	78-93-3	0.12	mg/kg	0.014	UJ	0.015	U	0.012	U	0.013	U	0.0088	U	0.012	U	0.012		0.012	U	0.71	U	0.011	U	0.027	U	0.034	U	0.011	UJ	0.019	U	0.01	J
Carbon Disulfide	75-15-0	--	mg/kg	0.014	U	0.015	U	0.012	U	0.013	U	0.008	U	0.012	U	0.098	U	0.012	U	0.71	U	0.011	U	0.027	U	0.034	U	0.011	U	0.019	U	0.022	U
Cyclohexane	110-82-7	--	mg/kg	0.027	U	0.0014	J	0.00057	J	0.026	U	0.018	U	0.025	U	0.02	U	0.023	U	1.4	U	0.023	U	0.053	U	0.068	U	0.022	UJ	0.038	U	0.044	U
Ethylbenzene	100-41-4	1	mg/kg	0.0014	U	0.0015	U	0.0012	U	0.0013	U	0.0088	U	0.0012	U	0.0098	U	0.0012	U	0.071	U	0.0011	U	0.0027	U	0.0034	U	0.0011	U	0.0019	U	0.0022	U
p-Isopropyltoluene	99-87-6	--	mg/kg	0.0014	U	0.0015	U	0.0012	U	0.0019		0.00088	U	0.0012	U	0.00073	J	0.0012	U	0.071	U	0.0011	U	0.0027	U	0.0034	U	0.0011	UJ	0.0019	U	0.0022	U
Methyl cyclohexane	108-87-2	--	mg/kg	0.0054	U	0.002	J	0.00084	J	0.0053	U	0.0035	U	0.005	U	0.0039	U	0.0046	U	0.28	U	0.0046	U	0.011	U	0.014	U	0.0043	UJ	0.0075	U	0.0088	U
Methylene chloride	75-09-2	0.05	mg/kg	0.014	U	0.015	U	0.012	U	0.013	U	0.0088	U	0.012	U	0.0098	U	0.012	U	0.71	U	0.011	U	0.027	U	0.034	U	0.011	UJ	0.019	U	0.022	U
Toluene	108-88-3	0.7	mg/kg	0.002	U	0.0023	U	0.0018	U	0.0013	U	0.0013	U	0.0019	U	0.0015	U	0.0017	U	0.049	J	0.0011	U	0.0027	U	0.0051	U	0.0016	U	0.0028	U	0.0033	U
Semivolatile Organics by 8270D																															
2-Methylnaphthalene	91-57-6	--	mg/kg	4.8	U	0.23	U	0.24	U	6.6	U	0.22	U	0.24	U	0.46	U	0.24	U	4.9		0.26	U	1.4	U	1.2	U	0.25	U	0.28	U	2.8	U
3-Methylphenol/4-Methylphenol	108-39-4 / 106-44-5	0.33	mg/kg	5.8	U	0.28	U	0.28	U	7.9	U	0.26	U	0.29	U	0.55	U	0.29	U	1.1	J	0.31	U	1.6	U	1.4	U	0.3	U	0.33	U	3.4	U
Acenaphthene	83-32-9	20	mg/kg	3.2	U	0.16	U	0.16	U	4.4	U	0.14	U	0.16	U	0.24	J	0.071	J	3.3		0.17	U	0.91	U	0.81	U	0.16	U	0.18	U	1.9	U
Acenaphthylene	208-96-8	100	mg/kg	1.1	J	0.16	U	0.16	U	4.7		0.14	U	0.16	U	0.41		0.094	J	5.4		0.17	U	0.91	U	0.81	U	0.16	U	0.18	U	1.9	U
Anthracene	120-12-7	100	mg/kg	3.3		0.12	U	0.12	U	6.7		0.11	U	0.12	U	0.87		0.22		9.2		0.033	J	0.68	U	0.61	U	0.12	U	0.14	U	0.73	J
Benzo(a)anthracene	56-55-3	1	mg/kg	8.1		0.12	U	0.12	U	25		0.11	U	0.12	U	2.7		0.64		15		0.084	J	0.68	U	0.61	U	0.12	U	0.14	U	2.5	
Benzo(a)pyrene	50-32-8	1	mg/kg	7		0.16	U	0.16	U	23		0.14	U	0.16	U	2.8		0.56		14		0.082	J	0.91	U	0.81	U	0.16	U	0.18	U	2.6	
Benzo(b)fluoranthene	205-99-2	1	mg/kg	8		0.061	J	0.12	U	30		0.11	U	0.12	U	3.8		0.8		17		0.097	J	0.68	U	0.61	U	0.12	U	0.14	U	3	
Benzo(ghi)perylene	191-24-2	100	mg/kg	4		0.16	U	0.16	U	15		0.14	U	0.16	U	1.7		0.35		8.5		0.064	J	0.91	U	0.81	U	0.16	U	0.18	U	1.5	J
Benzo(k)fluoranthene	207-08-9	0.8	mg/kg	3.5		0.12	U	0.12	U	13		0.11	U	0.12	U	1.2		0.29		7		0.04	J	0.68	U	0.61	U	0.12	U	0.14	U	1.5	
Benzoic Acid	65-85-0	--	mg/kg	13	U	0.63	U	0.63	U	18	U	0.59	U	0.65	U	1.2	U	0.66	U	6.5	U	0.7	U	3.7	U	3.3	U	0.66	U	0.74	U	7.7	U
Benzyl Alcohol	100-51-6	--	mg/kg	4	U	0.19	U	0.2	U	5.5	U	0.18	U	0.2	U	0.38	U	0.2	U	2	U	0.22	U	1.1	U	1	U	0.2	U	0.23	U	2.4	U
Bis(2-Ethylhexyl)phthalate	117-81-7	--	mg/kg	4	U	0.19	U	0.2	U	5.5	U	0.18	U	0.2	U	0.38	U	0.2	U	0.85	NJ	0.22	U	1.1	U	1	U	0.2	U	0.23	U	2.4	U
Butyl benzyl phthalate	85-68-7	--	mg/kg	4	U	0.19	U	0.2	U	5.5	U	0.18	U	0.2	U	0.38	U	0.2	U	2	U	0.22	U	1.1	U	1	U	0.2	U	0.23	U	2.4	U
Carbazole	86-74-8	--	mg/kg	0.79	J	0.19	U	0.2	U	1.6	J	0.18	U	0.2	U	0.67		0.16	J	5.1		0.22	U	1.1	U	1	U	0.2	U	0.23	U	0.52	J
Chrysene	218-01-9	1	mg/kg	8		0.049	J	0.12	U	26		0.11	U	0.12	U	2.9		0.68		15		0.082	J	0.68	U	0.61	U	0.12	U	0.14	U	2.6	
Di-n-butylphthalate	84-74-2	--	mg/kg	4	U	0.19	U	0.2	U	5.5	U	0.18	U	0.2	U	0.38	U	0.2	U	2	U	0.22	U	1.1	U	1	U	0.2	U	0.23	U	2.4	U
Dibenzo(a,h)anthracene	53-70-3	0.33	mg/kg	1.1	J	0.12	U	0.12	U	4.3		0.11	U	0.12	U	0.55		0.098	J	2.6		0.13	U	0.68	U	0.61	U	0.12	U	0.14	U	1.4	U
Dibenzofuran	132-64-9	7	mg/kg	4	U	0.19	U	0.2	U	5.5	U	0.18	U	0.2	U	0.26	J	0.063	J	6		0.22	U	1.1	U	1	U	0.2	U	0.23	U	2.4	U
Fluoranthene	206-44-0	100	mg/kg	15		0.058	J	0.043	J	42		0.11	U	0.12	U	6		1.4		31		0.17		0.25	J	0.61	U	0.12	U	0.032	J	5.1	
Fluorene	86-73-7	30	mg/kg	0.98	J	0.19	U	0.2	U	5.5	U	0.18	U	0.2	U	0.36	NJ	0.089	J	7		0.22	U	1.1	U	1	U	0.2	U	0.23	U	2.4	U
Hexachlorobenzene	118-74-1	0.33	mg/kg	2.4	U	0.12	U	0.12	U	3.3	U	0.11	U	0.12	U	0.23	U	0.12	U	1.2	U	0.13	U	0.68	U	0.61	U	0.12	U	0.14	U	1.4	U
Indeno(1,2,3-cd)Pyrene	193-39-5	0.5	mg/kg	4.6		0.16	U	0.16	U	13		0.14	U	0.16	U	1.6		0.31		7.7		0.17	U	0.91	U	0.81	U	0.16	U	0.18	U	1.4	J
Naphthalene	91-20-3	12	mg/kg	4	U	0.19	U	0.2	U	5.5	U	0.18	U	0.2	U	0.15	J	0.2	U	19		0.22	U	1.1	U	1	U	0.2	U	0.23	U	2.4	U
Phenanthrene	85-01-8	100	mg/kg	10		0.048	J	0.12	U	15		0.11	U	0.12	U	3.8		1.1		36		0.14		0.68	U	0.61	U	0.12	U	0.14	U	2.8	
Phenol	108-95-2	0.33	mg/kg	4	U	0.19	U	0.2	U	5.5	U	0.18	U	0.2	U	0.38	U	0.2	U	0.66	J	0.22	U	1.1	U	1	U	0.2	U	0.23	U	2.4	U
Pyrene	129-00-0	100	mg/kg	12		0.049	J	0.035	J	38		0.11	U	0.12	U	4.6		1.1		25		0.14		0.19	J	0.61	U	0.12	U	0.14	U	4.1	
Total PAHs (CP-51) [3]		**500**	**mg/kg**	**86.68**		**0.265**		**0.078**		**255.7**		**ND**		**ND**		**33.68**		**7.802**		**222.7**		**0.932**		**0.44**		**ND**		**ND**		**0.032**		**27.83**	
Organochlorine Pesticides by 8081B																															
4,4'-DDD	72-54-8	0.0033	mg/kg	0.071	J	0.0018	UJ	0.00182	UJ	0.0264	NJ	0.000645	J	0.00186	U	0.0175	NJ	0.000857	J	0.00518	J	0.00279	NJ	0.00108	UJ	0.00183	U	0.00196	U	0.00211	U	0.0214	U
4,4'-DDE	72-55-9	0.0033	mg/kg	0.0332	J	0.00278	J	0.00204	J	0.0323	J	0.00128	UJ	0.00186	U	0.00333	J	0.00608	NJ	0.0102	NJ	0.00673		0.0122	NJ	0.00506	J	0.00196	U	0.00391		0.00226	U
4,4'-DDT	50-29-3	0.0033	mg/kg	0.0621	J	0.00229	J	0.00215	J	0.0666	UJ	0.00322	UJ	0.0035	U	0.00204	UJ	0.0141	NJ	0.0084	NJ	0.0191	NJ	0.0293	NJ	0.00342	U	0.00367	U	0.0123	NJ	0.0074	U
Alpha-BHC	319-84-6	0.02	mg/kg	0.00776	UJ	0.000751	UJ	0.000761	UJ	0.00848	UJ	0.000717	UJ	0.000777	U	0.00074	UJ	0.000779	UJ	0.000804	UJ	0.000841	U	0.00392	J	0.000761	U	0.00235	J	0.00088	U	0.000944	U
Chlordane	57-74-9	--	mg/kg	0.341	NJ	0.0146	UJ	0.0148	UJ	0.225	J	0.014	UJ	0.0151	U	0.0144	UJ	0.0152	UJ	0.0157	UJ	0.0164	U	0.017	UJ	0.0148	U	0.0159	U	0.0172	U	0.0184	U
cis-Chlordane	5103-71-9	0.094	mg/kg	0.0285	NJ	0.00225	UJ	0.00228	UJ	0.0198	J	0.00215	UJ	0.00233	U	0.00222	UJ	0.00234	UJ	0.00241	UJ	0.00265	J	0.00262	UJ	0.00228	U	0.00245	U	0.00264	U	0.00283	U
Dieldrin	60-57-1	0.005	mg/kg	0.0116	UJ	0.00113	UJ	0.00114	UJ	0.0127	UJ	0.00108	UJ	0.00116	U	0.00111	UJ	0.00117	UJ	0.00121	UJ	0.0024	NJ	0.00131	UJ	0.00114	U	0.00122	U	0.00132	U	0.00142	U
Endrin ketone	53494-70-5	--	mg/kg	0.0186	UJ	0.0018	UJ	0.00182	UJ	0.0203	UJ	0.00172	UJ	0.00186	U	0.00178	UJ	0.00187	UJ	0.00193	UJ	0.00202	UJ	0.00209	UJ	0.00183	U	0.00196	U	0.00211	U	0.00226	U
Heptachlor	76-44-8	0.042	mg/kg	0.00931	UJ	0.000901	UJ	0.000913	UJ	0.0102	UJ	0.00086	UJ	0.000932	U	0.000888	UJ	0.000935	UJ	0.000965	UJ	0.00101	U	0.00105	UJ	0.000913	U	0.000979	U	0.00106	U	0.00113	U
Lindane	58-89-9	0.1	mg/kg	0.00776	UJ	0.000751	UJ	0.000761	UJ	0.00848	UJ	0.000717	UJ	0.000777	U	0.00074	UJ	0.000779	UJ	0.000804	UJ	0.000841	U	0.000872	UJ	0.000761	U	0.000816	U	0.00088	U	0.000944	U
Methoxychlor	72-43-5	--	mg/kg	0.0349	UJ	0.00338	UJ	0.00342	UJ	0.0381	UJ	0.00322	UJ	0.0035	U	0.00333	UJ	0.0035	UJ	0.00362	UJ	0.00378	UJ	0.00392	UJ	0.00342	U	0.00367	U	0.00396	U	0.00425	U
trans-Chlordane	5103-74-2	--	mg/kg	0.0395	J	0.00225	UJ	0.00228	UJ	0.0301	NJ	0.00215	UJ	0.00233	U	0.00222	UJ	0.00234	UJ	0.00241	UJ	0.00252	U	0.00262	UJ	0.00228	U	0.00245	U	0.00264	U	0.00283	U
Polychlorinated Biphenyls by 8082A																															
Aroclor 1254	11097-69-1	0.1	mg/kg	0.135	J	0.0374	UJ	0.0386	UJ	0.0874	UJ	0.0354	UJ	0.0394	UJ	0.038	UJ	0.0396	UJ	0.0706	J	0.0164	J	0.0443	U	0.0384	UJ	0.0387	UJ	0.0456	UJ	0.032	J
Aroclor 1260	11096-82-5	0.1	mg/kg	0.12	J	0.0374	UJ	0.0386	UJ	0.0316	J	0.0354	UJ	0.0394	UJ	0.038	UJ	0.00824	J	0.0382	J	0.00827	J	0.0111	J	0.0384	UJ	0.0387	UJ	0.0456	UJ	0.0464	U
Total Metals by 6010C/7471B (Mercury)																															
Aluminum, Total	7429-90-5	--	mg/kg	8700		10000		8700		4400		6700		7300		5800		5500		5300		6600		12000		5500		11000		8500		7400	
Antimony, Total	7440-36-0	--	mg/kg	45	J	2.1	J	2.3	J	9.1	J	2.2	J	4.7	UJ	1.3	J	4.8	UJ	2.5	J	3.6	J	5.4	J	9.2	UJ	5.5	J	5.2	UJ	3.9	J
Arsenic, Total	7440-38-2	13	mg/kg	9.7		6	J	5.9	J	10		4.3		4.4		3.4		4.3		7.8		5.4		17		48		7.5		9.4		7.4	
Barium, Total	7440-39-3	350	mg/kg	450		66		61		630		46		44		83		81		530		660	J	540	J	1600		100		230		630	J
Beryllium, Total	7440-41-7	7.2	mg/kg	0.72		0.47		0.41	J	0.32	J	0.33	J	0.33	J	0.29	J	0.28	J	0.31	J	0.34	J	1.1		0.09	J	0.59		0.7		0.41	J
Cadmium, Total	7440-43-9	2.5	mg/kg	1.7		0.1	J	0.12	J	4.3		0.13	J	0.68	J	0.18	J	0.77	J	2		0.83	J	1.2		12		0.06	J	0.6	J	1.1	
Calcium, Total	7440-70-2	--	mg/kg	62000		21000		5600		55000		4300		7800		7000		4000		34000		9400		11000		31000		4500		5200		43000	
Chromium, Total	7440-47-3	--	mg/kg	120	J	14		12		29		9.8		10	J	9.5		9.7		24		26		30		110	J	21	J	12	J	19	
Cobalt, Total	7440-48-4	--	mg/kg	5.7		7.8		7.7		5		6.5		6.7		5.6		5.5		5.1		6.4		12		28		11		8.5		4.5	
Copper, Total	7440-50-8	50	mg/kg	120	J	25		22		110		18		20		18		21		27		24		110		820		410		45		25	
Iron, Total	7439-89-6	--	mg/kg	27000		18000		17000		32000	J	14000	J	16000		12000	J	13000	J	12000	J	18000		18000		340000		24000		8800		10000	
Lead, Total	7439-92-1	63	mg/kg	1700	J	26	J	24	J	4900		14		15	J	300		140		1700		2500	J	450	J	2600	J	43	J	73	J	2000	J
Magnesium, Total	7439-95-4	--	mg/kg	9600		7700		4300		5300		3700		4300		3600		2800		6000		4200	J	1400	J	1500		4500		440		6300	J
Manganese, Total	7439-96-5	1600	mg/kg	1000		350	J	410	J	370		340		370		280		280		300		270		240		1600		540		120		210	
Mercury, Total	7439-97-6	0.18	mg/kg	1.8		0.07	J	0.05	J	0.67	J	0.03	J	0.04	J	0.07	J	0.09	J	0.36	J	0.13		0.09	J	0.12	J	0.08	J	0.03	J	0.86	
Nickel, Total	7440-02-0	30	mg/kg	44		22		21		12		18		19		15		16		19		17		31		190		30		18		11	
Potassium, Total	7440-09-7	--	mg/kg	1000	J	1400		880		500		600		750		610		720		770		960		1300		1300		1600		890		1200	
Selenium, Total	7782-49-2	3.9	mg/kg	3		1.4	J	1.5	J	3.1		0.98	J	1.9	U	0.98	J	0.93	J	1.6	J	1.3	J	2.5		3.7	U	0.75	J	0.48	J	1.1	J
Silver, Total	7440-22-4	2	mg/kg	0.54	J	0.91	U	0.91	U	0.41	J	0.88	U	0.95	U	0.88	U	0.96	U	0.31	J	0.21	J	0.6	J	6.7		0.7	J	1	U	0.28	J
Sodium, Total	7440-23-5	--	mg/kg	710		210		180		390		100	J	190	U	92	J	140	J	330		93	J	680		1400		170	J	370		160	J
Vanadium, Total	7440-62-2	--	mg/kg	45		18		15		19		12		13		12		12		21		15		41		1.6	J	24		28		23	
Zinc, Total	7440-66-6	109	mg/kg	670		81	J	82	J	1600		61		130	J	91		120		630		410		550		2500	J	130	J	81	J	570	

TABLE 5A

BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC

SUMMARY OF POST-REMEDIAL SOIL/FILL CONTAMINATION ABOVE UNRESTRICTED SCOs
REMEDIAL INVESTIGATION

Site Management Plan
154 South Ogden Street Site
Buffalo, New York

Compound [1]	CasNum	USCO [2]	Units	Sample Location, Collection Date, and Laboratory Qualifier															
				SB-37 (10-12) 1/10/2013	Qual	SB-38 (10-12) 1/11/2013	Qual	MS/MSD SS-1 1/10/2013	Qual	SS-2 1/10/2013	Qual	SS-3 1/10/2013	Qual	SS-4 1/17/2013	Qual	SS-5 1/18/2013	Qual	SS-7 1/11/2013	Qual	SS-8 1/18/2013	Qual
General Chemistry																			
Solids, Total	NONE	--	%	69		70		70		70		62		70		63		42		64	
Volatile Organics by 8260C/5035																			
Acetone	67-64-1	0.05	mg/kg	0.14	J	0.014	U	-		-		-		-		-		-		-	
2-Butanone	78-93-3	0.12	mg/kg	0.014	U	0.014	U	-		-		-		-		-		-		-	
Carbon Disulfide	75-15-0	--	mg/kg	0.0071	J	0.014	U	-		-		-		-		-		-		-	
Cyclohexane	110-82-7	--	mg/kg	0.029	J	0.029	U	-		-		-		-		-		-		-	
Ethylbenzene	100-41-4	1	mg/kg	0.00033	J	0.0014	U	-		-		-		-		-		-		-	
p-Isopropyltoluene	99-87-6	--	mg/kg	0.094	J	0.0014	U	-		-		-		-		-		-		-	
Methyl cyclohexane	108-87-2	--	mg/kg	0.0058	U	0.0058	U	-		-		-		-		-		-		-	
Methylene chloride	75-09-2	0.05	mg/kg	0.0059	J	0.014	U	-		-		-		-		-		-		-	
Toluene	108-88-3	0.7	mg/kg	0.0028	J	0.0028	U	-		-		-		-		-		-		-	
Semivolatile Organics by 8270D																			
2-Methylnaphthalene	91-57-6	--	mg/kg	2.9	U	2.8	U	0.56	U	0.28	U	0.32	U	1.4	U	0.32	U	0.46	U	0.62	U
3-Methylphenol/4-Methylphenol	108-39-4 / 106-44-5	0.33	mg/kg	3.4	U	3.4	U	0.68	U	0.34	U	0.38	U	1.7	U	0.38	U	0.56	U	0.75	U
Acenaphthene	83-32-9	20	mg/kg	2.3		1.9	U	0.38	U	0.19	U	0.21	U	0.45	J	0.15	J	0.31	U	0.18	J
Acenaphthylene	208-96-8	100	mg/kg	1.9	U	1.1	J	0.38	U	0.19	U	0.21	U	1.2		0.14	J	0.31	U	0.19	J
Anthracene	120-12-7	100	mg/kg	3.7		1.2	J	0.13	J	0.14	U	0.16	U	2.4		0.49		0.086	J	0.92	
Benzo(a)anthracene	56-55-3	1	mg/kg	7.1		3.7	J	0.36		0.14	U	0.16	U	5.4		1.8		0.29		3.3	
Benzo(a)pyrene	50-32-8	1	mg/kg	6.2		3.8	J	0.28	J	0.19	U	0.21	U	5		1.5		0.31		2.3	
Benzo(b)fluoranthene	205-99-2	1	mg/kg	8		4.5	J	0.41		0.14	U	0.16	U	6.5		2.1		0.42		4	
Benzo(ghi)perylene	191-24-2	100	mg/kg	4		1.9	J	0.18	J	0.19	U	0.21	U	2.5		0.9		0.18	J	1.4	
Benzo(k)fluoranthene	207-08-9	0.8	mg/kg	3.3		2.2	J	0.15	J	0.14	U	0.16	U	2.7		0.67		0.13	J	1.2	
Benzoic Acid	65-85-0	--	mg/kg	7.8	U	7.6	U	1.5	U	0.76	U	0.86	U	3.8	U		R	0.48	J		R
Benzyl Alcohol	100-51-6	--	mg/kg	2.4	U	2.3	U	0.47	U	0.23	U	0.26	U	1.2	U	0.26	U	0.39	U	0.52	U
Bis(2-Ethylhexyl)phthalate	117-81-7	--	mg/kg	14		2.3	U	0.47	U	0.23	U	0.26	U	1.2	U	0.26	U	0.39	U	0.52	U
Butyl benzyl phthalate	85-68-7	--	mg/kg	17		2.3	U	0.47	U	0.23	U	0.26	U	1.2	U	0.26	U	0.39	U	0.52	U
Carbazole	86-74-8	--	mg/kg	2	J	1.4	J	0.47	U	0.23	U	0.26	U	0.59	J	0.36		0.39	U	0.57	
Chrysene	218-01-9	1	mg/kg	6.9		4.3	J	0.34		0.14	U	0.16	U	4.7		1.7		0.31		3.5	
Di-n-butylphthalate	84-74-2	--	mg/kg	5.6		2.3	U	0.47	U	0.23	U	0.26	U	1.2	U	0.26	U	0.066	J	0.52	U
Dibenzo(a,h)anthracene	53-70-3	0.33	mg/kg	1	J	0.69	J	0.28	U	0.14	U	0.16	U	0.83		0.25		0.23	U	0.58	
Dibenzofuran	132-64-9	7	mg/kg	1.1	J	0.67	J	0.47	U	0.23	U	0.26	U	0.34	J	0.096	J	0.39	U	0.14	J
Fluoranthene	206-44-0	100	mg/kg	17		8.5	J	0.79		0.14	U	0.16	U	13		3.3		0.6		6	
Fluorene	86-73-7	30	mg/kg	1.8	J	0.95	J	0.47	U	0.23	U	0.26	U	0.94	J	0.15	J	0.39	U	0.26	J
Hexachlorobenzene	118-74-1	0.33	mg/kg	1.4	U	1.4	U	0.28	U	0.14	U	0.16	U	0.7	U	0.16	U	0.23	U	0.31	U
Indeno(1,2,3-cd)Pyrene	193-39-5	0.5	mg/kg	3.4		1.7	J	0.16	J	0.19	U	0.21	U	3.2		1.1		0.16	J	1.6	
Naphthalene	91-20-3	12	mg/kg	1.5	J	0.9	J	0.47	U	0.23	U	0.26	U	1.2	U	0.26	U	0.39	U	0.52	U
Phenanthrene	85-01-8	100	mg/kg	14		9.9	J	0.56		0.14	U	0.16	U	7.1		1.9		0.37		4.2	
Phenol	108-95-2	0.33	mg/kg	2.4	U	2.3	U	0.47	U	0.23	U	0.26	U	1.2	U	0.26	U	0.39	U	0.52	U
Pyrene	129-00-0	100	mg/kg	13		7.3	J	0.6		0.14	U	0.16	U	9.2		2.6		0.49		4.4	
Total PAHs (CP-51) [3]		**500**	**mg/kg**	**93.2**		**52.64**		**3.96**		**ND**		**ND**		**65.12**		**18.75**		**3.346**		**34.03**	
Organochlorine Pesticides by 8081B																			
4,4'-DDD	72-54-8	0.0033	mg/kg	0.218	NJ	0.0103	J	0.00224	U	0.00218	UJ	0.0025	UJ	0.0022	U	0.00248	U	0.00361	U	0.00244	U
4,4'-DDE	72-55-9	0.0033	mg/kg	0.0437	U	0.00224	U	0.00768	NJ	0.00314	J	0.00268	J	0.0022	U	0.0185	J	0.0127	NJ	0.00817	NJ
4,4'-DDT	50-29-3	0.0033	mg/kg	0.0849	J	0.0042	UJ	0.00725	J	0.00239	J	0.00256	J	0.00413	U	0.0319		0.0154		0.0378	J
Alpha-BHC	319-84-6	0.02	mg/kg	0.0182	U	0.000934	U	0.000934	U	0.000909	UJ	0.00104	UJ	0.000918	U	0.00104	U	0.0015	U	0.00126	NJ
Chlordane	57-74-9	--	mg/kg	0.319	U	0.0182	U	0.0182	U	0.0177	UJ	0.0203	UJ	0.0179	U	0.0202	U	0.0293	U	0.122	
cis-Chlordane	5103-71-9	0.094	mg/kg	0.0335	J	0.0028	U	0.0028	U	0.00273	UJ	0.00312	UJ	0.00364	NJ	0.00311	U	0.00451	U	0.00774	NJ
Dieldrin	60-57-1	0.005	mg/kg	0.0273	U	0.0014	U	0.0014	U	0.00136	UJ	0.00156	UJ	0.00138	U	0.00155	U	0.00226	U	0.00152	U
Endrin ketone	53494-70-5	--	mg/kg	0.0437	UJ	0.00224	U	0.00224	UJ	0.00218	UJ	0.0025	UJ	0.0022	U	0.00782	NJ	0.00361	U	0.00881	NJ
Heptachlor	76-44-8	0.042	mg/kg	0.0219	U	0.00112	U	0.00112	U	0.00109	UJ	0.00125	UJ	0.0011	U	0.00124	U	0.0018	U	0.00122	U
Lindane	58-89-9	0.1	mg/kg	0.0182	U	0.000934	UJ	0.000934	U	0.000909	UJ	0.00104	UJ	0.000918	U	0.00104	U	0.0015	U	0.00101	U
Methoxychlor	72-43-5	--	mg/kg	0.082	UJ	0.0042	U	0.0042	UJ	0.00409	UJ	0.00468	UJ	0.00413	U	0.00466	U	0.00677	U	0.00456	UJ
trans-Chlordane	5103-74-2	--	mg/kg	0.0355	NJ	0.0028	U	0.0028	U	0.00273	UJ	0.00312	UJ	0.00275	U	0.00311	U	0.00451	U	0.00726	NJ
Polychlorinated Biphenyls by 8082A																			
Aroclor 1254	11097-69-1	0.1	mg/kg	0.229	UJ	0.0449	U	0.0461	UJ	0.0453	UJ	0.0521	UJ	0.0457	UJ	0.102	UJ	0.0344	J	0.1	UJ
Aroclor 1260	11096-82-5	0.1	mg/kg	0.229	UJ	0.0119	J	0.0108	J	0.0453	UJ	0.0521	UJ	0.0138	J	0.102	UJ	0.0365	J	0.1	UJ
Total Metals by 6010C/7471B (Mercury)																			
Aluminum, Total	7429-90-5	--	mg/kg	4200		13000		6000		5200	J	14000		10000		7500		12000		5500	
Antimony, Total	7440-36-0	--	mg/kg	2.9	J	4	J	3.1	J	4	J	3.1	J	2.8	J	2.2	J	7.8	J	1.8	J
Arsenic, Total	7440-38-2	13	mg/kg	8.6		6.1		5.5		4.5	J	7.6		7.2	J	6.3	J	18		5.1	J
Barium, Total	7440-39-3	350	mg/kg	360	J	100	J	72		42	J	110		150		130		290		320	
Beryllium, Total	7440-41-7	7.2	mg/kg	0.25	J	0.61		0.37	J	0.33	J	1.1		0.43		0.37	J	1		0.27	J
Cadmium, Total	7440-43-9	2.5	mg/kg	3.1		0.77	J	0.77	J	2.7	U	0.26	J	0.41	J	0.73	J	6.9		1.6	
Calcium, Total	7440-70-2	--	mg/kg	30000		20000		67000		190000	J	45000		42000		7000		19000		19000	
Chromium, Total	7440-47-3	--	mg/kg	30		25	J	13		10	J	19		22		14		45		18	
Cobalt, Total	7440-48-4	--	mg/kg	5.4		11		5.5		5.3	J	8.8		8.2		6.7		11		6.1	
Copper, Total	7440-50-8	50	mg/kg	48		40		21		12	J	27		54		25		110		24	
Iron, Total	7439-89-6	--	mg/kg	16000		27000		14000		10000	J	22000		22000		15000		25000		11000	
Lead, Total	7439-92-1	63	mg/kg	1200	J	78	J	77	J	13	J	45	J	280	J	330	J	660	J	950	J
Magnesium, Total	7439-95-4	--	mg/kg	4600	J	8600	J	15000		7400		13000		5400		3200		1600		4300	
Manganese, Total	7439-96-5	1600	mg/kg	230		460		320		250		670		680	J	340	J	620		270	J
Mercury, Total	7439-97-6	0.18	mg/kg	1.9		0.51		0.1	J	0.03	J	0.09	J	0.09	J	0.12	J	0.34	J	0.19	
Nickel, Total	7440-02-0	30	mg/kg	13		33		16	J	12	J	21	J	47		18		41	J	16	
Potassium, Total	7440-09-7	--	mg/kg	670		1800		1400	J	1200	J	3000	J	1800		1400		2000	J	970	
Selenium, Total	7782-49-2	3.9	mg/kg	1.8	J	1.7	J	1.1	J	1.7	J	1.4	J	1	J	1.8	J	5.7		0.97	J
Silver, Total	7440-22-4	2	mg/kg	1.1	U	0.27	J	0.69	J	2.7	U	1.2	U	0.22	J	1.2	U	0.95	J	1.2	U
Sodium, Total	7440-23-5	--	mg/kg	330		220		460		540	U	370		590		230	J	360	J	300	
Vanadium, Total	7440-62-2	--	mg/kg	15		23		15		13	J	24		21		17		40		14	
Zinc, Total	7440-66-6	109	mg/kg	950		180		140	J	45	J	160	J	240	J	350	J	1100	J	580	J

TABLE 5A

SUMMARY OF POST-REMEDIAL SOIL/FILL CONTAMINATION ABOVE UNRESTRICTED SCOs
REMEDIAL INVESTIGATION

Site Management Plan
154 South Ogden Street Site
Buffalo, New York

Notes:
1. Only compounds detected with reporting limits that exceed the corresponding regulatory standard in at least one sample are included on the summary sheets.
2. Unrestricted Use Soil Cleanup Objective per 6NYCRR Part 375.
3. In accordance with NYSDEC Soil Cleanup Guidance, Policy CP-51, compounds only include the total of those polycyclic aromatic hydrocarbons (PAHs) detected above the laboratory method detection limit.

Qualifier Key:

B	The analyte was detected above the reporting limit in the associated method blank.
NJ	The detection is tentative in identification and estimated in value. Although there is presumptive evidence of the analyte, the result should be used with caution as a potential false positive and/or elevated qantitative value.
J	The analyte was positively identified; the associated numerical value is an approximate concentration of the analyte in the sample.
R	The data are unusable. The analyte may or may not be present.
D	Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
U	The analyte was analyzed for, but was not detected above the level of the associated reported quantitation limit.
UJ	The analyte was not detected. The associated reported quantitation limit is an estimate and may be inaccurate or imprecise.
EMPC	The results do not meet all criteria for a confirmed identification. The quantitative value represents the Estimated Maximum Possible Concentration of the analyte in the sample

Color Code:
= concentration exceeds the individual Unrestricted Use Soil Cleanup Objective (SCO) or the CP-51 total PAH concentration of 500 ppm.

BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC

TABLE 5B

SUMMARY OF POST-REMEDIAL SOIL/FILL CONTAMINATION ABOVE UNRESTRICTED SCOs
WESTERN PORTION OF SITE

Site Management Plan
154 South Ogden Street Site
Buffalo, New York

Compound [1]	CasNum	USCO [2]	Units	Sample Location, Collection Date, and Laboratory Qualifier																			
				SB-59 (0-2) 11/12/2013	Qual	SB-60 (0-2) 11/12/2013	Qual	SB-61 (0-2) 11/12/2013	Qual	SB-62 (0-2) 11/12/2013	Qual	SB-63 (0-2) 11/12/2013	Qual	SB-64 (0-2) 11/12/2013	Qual	SB-65 (0-2) 11/12/2013	Qual	SB-66 (0-2) 11/12/2013	Qual	SB-67 (0-2) 11/12/2013	Qual	SB-68 (0-2) 11/12/2013	Qual	SB-70 (0-2) 11/12/2013	Qual
General Chemistry - Westborough Lab																							
Solids, Total	NONE	--	%	83		77.2		84.6		78.3		85.8		77		76.3		76		85.8		81.8		85.4	
Semivolatile Organics by GC/MS - Westborough Lab (PAHs in blue)																							
2,4-Dinitrotoluene	121-14-2	--	mg/kg	1.2	U	0.42	U	0.19	U	0.42	U	0.19	U	0.43	U	0.42	U	0.21	U	0.19	U	0.85		0.19	U
2-Methylnaphthalene	91-57-6	--	mg/kg	1.1	J	0.5	U	0.23	U	0.51	U	0.23	U	0.52	U	0.51	U	0.25	U	0.23	U	0.089	J	0.24	
Acenaphthene	83-32-9	20	mg/kg	3.4		0.34	U	0.16	U	0.34	U	0.15	U	0.13	J	0.33	J	0.17	U	0.054	J	0.079	J	0.49	
Acenaphthylene	208-96-8	100	mg/kg	2.6		0.092	J	0.039	J	0.22	J	0.15	U	0.2	J	0.64		0.17	U	0.074	J	0.17		0.35	
Anthracene	120-12-7	100	mg/kg	10		0.37		0.077	J	0.26		0.068	J	0.46		1.2		0.13	U	0.2		0.31		1.5	J
Benzo(a)anthracene	56-55-3	1	mg/kg	20		0.99		0.24		0.79		0.16		1.1		3.1		0.068	J	0.43		0.87		2.1	J
Benzo(a)pyrene	50-32-8	1	mg/kg	18		0.85		0.21		0.71		0.15		0.91		2.6		0.055	J	0.36		0.74		1.5	J
Benzo(b)fluoranthene	205-99-2	1	mg/kg	23		1.1		0.28		0.92		0.22		1.3		3.7		0.074	J	0.5		0.96		2.3	J
Benzo(ghi)perylene	191-24-2	100	mg/kg	8.8		0.46		0.11	J	0.42		0.086	J	0.5		1.4		0.17	U	0.2		0.44		0.77	
Benzo(k)fluoranthene	207-08-9	0.8	mg/kg	9.6		0.42		0.12		0.4		0.072	J	0.47		1.2		0.13	U	0.2		0.31		0.77	
Carbazole	86-74-8	--	mg/kg	4.4		0.11	J	0.19	U	0.099	J	0.19	U	0.18	J	0.48		0.21	U	0.096	J	0.2		0.53	
Chrysene	218-01-9	1	mg/kg	21		0.93		0.24		0.78		0.16		1		2.9		0.059	J	0.38		0.86		1.9	J
Di-n-butylphthalate	84-74-2	--	mg/kg	1.2	U	0.42	U	0.19	U	0.42	U	0.19	U	0.43	U	0.42	U	0.21	U	0.11	J	0.2	U	0.19	
Dibenzo(a,h)anthracene	53-70-3	0.33	mg/kg	2.6		0.14	J	0.12	U	0.11	J	0.12	U	0.14	J	0.48		0.13	U	0.066	J	0.13		0.28	
Dibenzofuran	132-64-9	7	mg/kg	2.4		0.42	U	0.19	U	0.42	U	0.19	U	0.43	U	0.25	J	0.21	U	0.19	U	0.087	NJ	0.62	
Fluoranthene	206-44-0	100	mg/kg	42		2		0.45		1.6		0.35		2.3		5.9		0.12	J	0.87		1.8		3.8	J
Fluorene	86-73-7	30	mg/kg	3.8		0.12	J	0.19	U	0.42	U	0.19	U	0.21	J	0.42		0.21	U	0.077	J	0.1	J	1.2	J
Indeno(1,2,3-cd)Pyrene	193-39-5	0.5	mg/kg	10		0.5		0.13	J	0.36		0.076	J	0.45		1.3		0.17	U	0.19		0.39		0.76	
Naphthalene	91-20-3	12	mg/kg	1.8		0.42	U	0.19	U	0.42	U	0.19	U	0.43	U	0.25	J	0.21	U	0.19	U	0.27		0.22	
Phenanthrene	85-01-8	100	mg/kg	35		1.2		0.23		0.91		0.25		1.9		4.2		0.063	J	0.66		1.5		4.2	J
Pyrene	129-00-0	100	mg/kg	36		1.6		0.37		1.3		0.27		1.8		4.7		0.098	J	0.65		1.4		2.7	J
Total PAHs [3]		***500***	***mg/kg***	***247.6***		***10.77***		***2.686***		***8.780***		***1.862***		***12.87***		***34.32***		***0.5370***		***4.911***		***10.33***		***24.84***	
Total Metals - Westborough Lab																							
Arsenic, Total	7440-38-2	13	mg/kg	9	J	7.2	J	5.4	J	14	J	4.8	J	10	J	10	J	12	J	9.5	J	9	J	6.3	J
Barium, Total	7440-39-3	350	mg/kg	280	J	120	J	88	J	550	J	50	J	210	J	270	J	360	J	170	J	280	J	100	J
Cadmium, Total	7440-43-9	2.5	mg/kg	1.4		0.86		0.89		2.5		0.55		1.4		1.7		1.9		1.3		2		0.77	
Chromium, Total	7440-47-3	--	mg/kg	18	J	14	J	12	J	31	J	9.5	J	18	J	18	J	27	J	18	J	19	J	14	J
Lead, Total	7439-92-1	63	mg/kg	1400	J	210	J	160	J	870	J	26	J	440	J	610	J	1100	J	240	J	530	J	140	J
Mercury, Total	7439-97-6	0.18	mg/kg	1.3		0.47		0.18		0.21		0.1	U	0.2		0.49		0.03	J	0.19		0.07	J	0.35	
Selenium, Total	7782-49-2	3.9	mg/kg	0.32	J	0.99	U	0.14	J	2	U	0.89	U	0.17	J	0.4	J	2.1	U	1.8	U	1.9	U	0.91	U
Silver, Total	7440-22-4	2	mg/kg	0.52		0.5	U	0.44	U	1		0.45	U	2.7		0.69		0.79	J	0.4	J	0.52	J	0.18	J

Notes:

1. Only compounds detected with reporting limits that exceed the corresponding regulatory standard in at least one sample are included on the summary sheets.
2. Unrestricted Use Soil Cleanup Objective per 6NYCRR Part 375.
3. In accordance with NYSDEC Soil Cleanup Guidance, Policy CP-51, compounds only include the total of those polycyclic aromatic hydrocarbons (PAHs) detected above the laboratory method detection limit.
4. Blind duplicate of SB-69.

Qualifier Key:

J = Estimated value.
U = Not detected at the reported detection limit for the sample.
NJ = The detection is tenatative in identification and estimated in value. Although there is presumptive evidence of the analyte, the result should be used with caution as a potential false positive and/or elevated quantitation value.

Color Code:

= Concentration exceeds the individual Unrestricted Use Soil Cleanup Objective (SCO) or the CP-51 total PAH concentration of 500 ppm.
= Third party validator change/addition.

BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC

TABLE 5C

SUMMARY OF POST-REMEDIAL SOIL/FILL CONTAMINATION ABOVE UNRESTRICTED SCOs
AREA OF CONCERN (AOC) SB-4

Site Management Plan
154 South Ogden Street Site
Buffalo, New York

Compound [1]	CasNum	USCO [2]	Units	Location, Sample ID, & Sample Date											
				BOTTOM		EAST		NORTH		SOUTH				WEST	
				SB-4-B-1 (17.0') 07/16/2013	SB-4-B-2 (17.0') 07/17/2013	SB-4-SW-1 (13-14') 07/15/2013	SB-4-SW-2 (13-15') 07/16/2013	SB-4-SW-3 (11-15') 07/16/2013	SB-4-SW-5 (14-17') 07/17/2013	SB-4-SW-4 (14-17') 07/17/2013	SB-4-SW-8 (14-17') 07/17/2013	SB-4-SW-6 (14-17') 07/17/2013	SB-4-SW-7 (14-17') 07/17/2013
				Qual	Qual	Qual	Qual	Qual	Qual	Qual	Qual	Qual	Qual
General Chemistry - Westborough Lab													
Solids, Total	NONE	--	%	83.3	79.7	80.8	77.5	80.7	78	74.5	85.2	74.3	84.6
Volatile Organics by GC/MS (CP-51 compounds in red)													
1,2,4-Trimethylbenzene	95-63-6	3.6	mg/kg	ND	ND	ND	5.8	0.42	ND	0.0027 J	0.0046 J	ND	0.015
1,2-Dichlorobenzene	95-50-1	1.1	mg/kg	0.0028 J	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	108-67-8	8.4	mg/kg	ND	ND	ND	ND	ND	ND	ND	0.0019 J	ND	0.0095
2-Butanone (Methyl ethyl ketone)	78-93-3	0.12	mg/kg	ND	ND	ND	ND	ND	ND	0.018	0.014	ND	0.015
Acetone	67-64-1	0.05	mg/kg	0.016 J	ND	ND	ND	ND	ND	0.056	0.049	ND	0.047
Benzene	71-43-2	0.06	mg/kg	ND	0.016 J	ND	ND	ND	ND	ND	ND	ND	0.00067 J
Carbon disulfide	75-15-0	--	mg/kg	ND	ND	ND	ND	ND	ND	ND	0.0025 J	ND	0.0027 J
Cyclohexane	110-82-7	--	mg/kg	ND	ND	ND	ND	ND	ND	0.0036 J	ND	ND	0.0027 J
Ethylbenzene	100-41-4	1	mg/kg	0.00092 J	ND	ND	ND	ND	ND	ND	ND	ND	0.0065 J
Isopropylbenzene (p-Cumene)	98-82-8	--	mg/kg	ND	ND	ND	0.2	ND	ND	ND	0.00039 J	ND	0.0012
Methyl cyclohexane	108-87-2	--	mg/kg	ND	ND	ND	ND	ND	ND	0.0074	0.0017 J	ND	0.0074
Methylene chloride	75-09-2	0.05	mg/kg	ND	ND	0.0069 J	ND	ND	ND	ND	ND	ND	ND
n-Butylbenzene (Butylbenzene)	104-51-8	12	mg/kg	ND	ND	ND	0.19	0.08	ND	ND	ND	ND	0.00049 J
n-Propylbenzene	103-65-1	3.9	mg/kg	ND	ND	ND	0.32	0.042 J	ND	ND	ND	ND	0.00072 J
p-Isopropyltoluene (p-Cymene)	99-87-6	--	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	0.028 J	0.0019
sec-Butylbenzene	135-98-8	11	mg/kg	ND	ND	ND	0.14	ND	ND	ND	ND	ND	0.0006 J
Toluene	108-88-3	0.7	mg/kg	ND	0.025 J	ND	ND	ND	ND	0.0043 J	0.0034 J	0.034 J	ND
Xylenes, m/p	108-38-3 / 106-42-3	0.26	mg/kg	0.0025 J	ND	ND	ND	ND	ND	0.00055 J	0.00071 J	ND	0.0017 J
Xylenes, o	95-47-6	0.26	mg/kg	ND	ND	ND	ND	ND	ND	0.00085 J	0.00047 J	ND	0.0018 J
Semivolatile Organics by GC/MS (PAHs in blue)													
Acenaphthene	83-32-9	20	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.043 J
Anthracene	120-12-7	100	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.084 J
Benzo(a)anthracene	56-55-3	1	mg/kg	ND	0.075 J	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(a)pyrene	50-32-8	1	mg/kg	ND	ND	ND	ND	ND	ND	ND	0.047 J	ND	0.13 J
Benzo(b)fluoranthene	205-99-2	1	mg/kg	ND	0.065 J	ND	ND	ND	ND	ND	0.054 J	ND	0.16
Benzo(ghi)perylene	191-24-2	100	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.089 J
Benzo(k)fluoranthene	207-08-9	0.8	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.061 J
Chrysene	218-01-9	1	mg/kg	ND	0.059 J	ND	ND	ND	ND	ND	0.037 J	ND	0.15
Fluoranthene	206-44-0	100	mg/kg	ND	0.13 J	ND	ND	ND	ND	ND	0.072 J	ND	0.35
Indeno(1,2,3-cd)Pyrene	193-39-5	0.5	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.082 J
Naphthalene	91-20-3	12	mg/kg	ND	0.13 J	ND	ND	ND	ND	ND	ND	ND	0.09 J
Phenanthrene	85-01-8	100	mg/kg	ND	ND	ND	ND	ND	ND	ND	0.044 J	ND	0.3
Pyrene	129-00-0	100	mg/kg	ND	0.12 J	ND	ND	ND	ND	ND	0.062 J	ND	0.29
Total PAHs (CP-51) [3]		***500***	***mg/kg***	**0**	**0.579**	**0**	**0**	**0**	**0**	**0**	**0.316**	**0**	**1.829**
Total Metals - Westborough Lab													
Arsenic, Total	7440-38-2	13	mg/kg	5.4	3.9	1.2	4.1	2.5	5.3	4.9	2.6	6.3	5
Barium, Total	7440-39-3	350	mg/kg	8.2	27	24	50	29	52	73	28	48	38
Cadmium, Total	7440-43-9	2.5	mg/kg	0.3 J	0.49 J	0.61	0.57	0.33 J	0.59	0.64	0.35 J	0.62	0.54
Chromium, Total	7440-47-3	--	mg/kg	4.2	6	8.3	10	6.3	10	9.7	6.4	10	6.6
Lead, Total	7439-92-1	63	mg/kg	4.2	10	7	9.8	6.6	96	27	15	16	28
Mercury, Total	7439-97-6	0.18	mg/kg	ND	ND	ND	ND	ND	ND	0.04 J	ND	ND	ND
Selenium, Total	7782-49-2	3.9	mg/kg	0.34 J	0.33 J	0.94 J	0.27 J	0.2 J	0.25 J	0.46 J	ND	0.19 J	0.31 J
Silver, Total	7440-22-4	2	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Notes:

1. Only compounds detected with reporting limits that exceed the corresponding regulatory standard in at least one sample are included on the summary sheets.
2. Unrestricted Use Soil Cleanup Objective per 6NYCRR Part 375.
3. In accordance with NYSDEC Soil Cleanup Guidance, Policy CP-51, compounds only include the total of those polycyclic aromatic hydrocarbons (PAHs) detected above the laboratory method detection limit.

Qualifier Key:

J Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses.

Color Code:

= Concentration exceeds the individual Unrestricted Use Soil Cleanup Objective (SCO) or the CP-51 total PAH concentration of 500 ppm.

BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC

TABLE 5D

SUMMARY OF POST-REMEDIAL SOIL/FILL CONTAMINATION ABOVE UNRESTRICTED SCOs
AREA OF CONCERN (AOC) SB-14

Site Management Plan
154 South Ogden Street Site
Buffalo, New York

Compound [1]	CasNum	USCO [2]	Units	Sample Location, Depth, Date											
				SB-14-B-1 (10.0')		SB-14-SW-1 (6-8')		SB-14-SW-2 (6-8')		SB-14-SW-3 (6-8')		SB-14-SW-4 (6-8')	
				5/6/2013 L1308034-05	5/24/2013 L1309521-05	5/6/2013 L1308034-01	5/24/2013 L1309521-01	5/6/2013 L1308034-02	5/24/2013 L1309521-02	5/6/2013 L1308034-03	5/24/2013 L1309521-03	5/6/2013 L1308034-04	5/24/2013 L1309521-04
				Qual	Qual	Qual	Qual	Qual	Qual	Qual	Qual	Qual	Qual
General Chemistry - Westborough Lab													
Solids, Total	NONE	--	%	58.6	81	81.9	90	82.1	88	79.7	86	83.5	88
Semivolatile Organics by GC/MS - Westborough Lab													
2-Methylnaphthalene	91-57-6	--	mg/kg	-	0.82 J	-	0.44 J	-	0.37 J	-	1.1 J	-	0.4 J
Acenaphthene	83-32-9	20	mg/kg	-	2.4	-	0.49 J	-	0.84	-	3.3	-	0.3 J
Acenaphthylene	208-96-8	100	mg/kg	-	2	-	0.24 J	-	1.5	-	2.4	-	ND
Anthracene	120-12-7	100	mg/kg	-	10	-	1.5	-	5.5	-	12	-	0.79
Benzo(a)anthracene	56-55-3	1	mg/kg	-	23	-	3.5	-	12	-	25	-	1.4
Benzo(a)pyrene	50-32-8	1	mg/kg	-	21	-	2.9	-	10	-	23	-	1.1
Benzo(b)fluoranthene	205-99-2	1	mg/kg	-	26	-	3.7	-	12	-	32	-	1.4
Benzo(ghi)perylene	191-24-2	100	mg/kg	-	12	-	1.8	-	5.9	-	14	-	0.72 J
Benzo(k)fluoranthene	207-08-9	0.8	mg/kg	-	10	-	1.5	-	6.2	-	8.7	-	0.69
Carbazole	86-74-8	--	mg/kg	-	3.1	-	0.62 J	-	1.2	-	4.6	-	0.25 J
Chrysene	218-01-9	1	mg/kg	-	21	-	3.1	-	11	-	22	-	1.2
Dibenzo(a,h)anthracene	53-70-3	0.33	mg/kg	-	3.9	-	0.4 J	-	1.9	-	4	-	ND
Dibenzofuran	132-64-9	7	mg/kg	-	1.9	-	0.38 J	-	0.79	-	3.2	-	ND
Fluoranthene	206-44-0	100	mg/kg	-	50	-	7.6	-	28	-	56	-	3.2
Fluorene	86-73-7	30	mg/kg	-	3.4	-	0.63 J	-	1.4	-	4.6	-	ND
Indeno(1,2,3-cd)Pyrene	193-39-5	0.5	mg/kg	-	14	-	2.1	-	6.6	-	16	-	0.76 J
Naphthalene	91-20-3	12	mg/kg	-	1.7	-	ND	-	0.46 J	-	2.4	-	ND
Phenanthrene	85-01-8	100	mg/kg	-	37	-	5.4	-	20	-	41	-	2.8
Pyrene	129-00-0	100	mg/kg	-	46	-	5.9	-	25	-	45	-	2.4
Total SVOCs				**-**	**289.22**	**-**	**42.2**	**-**	**150.66**	**-**	**320.3**	**-**	**17.41**
Total PAHs (CP-51) [3]		**500**	**mg/kg**	**-**	**283.4**	**-**	**40.76**	**-**	**148.3**	**-**	**311.4**	**-**	**16.76**
Total RCRA Metals - Westborough Lab													
Arsenic, Total	7440-38-2	13	mg/kg	-	6.3	-	4.4	-	7.5	-	6.4	-	3.9
Barium, Total	7440-39-3	350	mg/kg	-	220	-	34	-	74	-	93	-	42
Cadmium, Total	7440-43-9	2.5	mg/kg	-	1.1	-	0.85	-	0.56	-	0.67	-	0.39 J
Chromium, Total	7440-47-3	--	mg/kg	-	13	-	8.6	-	13	-	10	-	6.2
Lead, Total	7439-92-1	63	mg/kg	2200	-	530	-	550	-	220	-	280	-
Mercury, Total	7439-97-6	0.18	mg/kg	-	0.87	-	0.55	-	0.17	-	1.1	-	0.25
Selenium, Total	7782-49-2	3.9	mg/kg	-	0.35 J	-	ND	-	0.18 J	-	0.2 J	-	ND
Silver, Total	7440-22-4	2	mg/kg	-	0.22 J	-	ND	-	ND	-	0.34 J	-	ND

Notes:

1. Only compounds detected with reporting limits that exceed the corresponding regulatory standard in at least one sample are included on the summary sheets.
2. Unrestricted Use Soil Cleanup Objective per 6NYCRR Part 375.
3. In accordance with NYSDEC Soil Cleanup Guidance, Policy CP-51, compounds only include the total of those polycyclic aromatic hydrocarbons (PAHs) detected above the laboratory method detection limit.

Qualifier Key:

J Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses.
ND Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

Color Code:

= Concentration exceeds the individual Unrestricted Use Soil Cleanup Objective (SCO) or the CP-51 total PAH concentration of 500 ppm.

BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC

TABLE 5E

SUMMARY OF POST-REMEDIAL SOIL/FILL CONTAMINATION ABOVE UNRESTRICTED SCOs
AREA OF CONCERN (AOC) SB-16

Site Management Plan
154 South Ogden Street Site
Buffalo, New York

Compound [1]	CasNum	USCO [2]	Units	Sample Location, Depth, Date											
				SB-16-B-1 (9.0')		SB-16-SW-1 (5-9')		SB-16-SW-2 (5-9')		SB-16-SW-3 (5-9')		SB-16-SW-4 (5-9')	
				5/6/2013 L1308034-10	5/24/2013 L1309520-05	5/6/2013 L1308034-06	5/24/2013 L1309520-01	5/6/2013 L1308034-07	5/24/2013 L1309520-02	5/6/2013 L1308034-08	5/24/2013 L1309520-03	5/6/2013 L1308034-09	5/24/2013 L1309520-04
				Qual	Qual	Qual	Qual	Qual	Qual	Qual	Qual	Qual	Qual
General Chemistry - Westborough Lab													
Solids, Total	NONE	--	%	77.7	84.9	84.1	91.8	80.8	85.8	83.1	81.2	82.4	86.4
Semivolatile Organics by GC/MS - Westborough Lab													
2-Methylnaphthalene	91-57-6	--	mg/kg	1 J	-	1.6	-	1.1 J	-	3.1	-	0.93 J	-
Acenaphthene	83-32-9	20	mg/kg	5.4	-	3.9	-	2.2	-	10	-	5.7	-
Acenaphthylene	208-96-8	100	mg/kg	2.4	-	3.1	-	12	-	1.4 J	-	2.5	-
Anthracene	120-12-7	100	mg/kg	14	-	13	-	15	-	21	-	18	-
Benzo(a)anthracene	56-55-3	1	mg/kg	32	-	24	-	29	-	34	-	33	-
Benzo(a)pyrene	50-32-8	1	mg/kg	28	-	18	-	26	-	28	-	26	-
Benzo(b)fluoranthene	205-99-2	1	mg/kg	38	-	25	-	38	-	38	-	34	-
Benzo(ghi)perylene	191-24-2	100	mg/kg	15	-	9.7	-	15	-	14	-	13	-
Benzo(k)fluoranthene	207-08-9	0.8	mg/kg	14	-	9.3	-	17	-	14	-	14	-
Biphenyl	92-52-4	--	mg/kg	ND	-	0.38 J	-	ND	-	0.72 J	-	ND	-
Carbazole	86-74-8	--	mg/kg	5.8	-	4.3	-	5.4	-	10	-	5.1	-
Chrysene	218-01-9	1	mg/kg	33	-	23	-	32	-	34	-	33	-
Dibenzo(a,h)anthracene	53-70-3	0.33	mg/kg	4.6	-	3	-	4.8	-	4.6	-	4	-
Dibenzofuran	132-64-9	7	mg/kg	2.6	-	3.1	-	3.7	-	6.8	-	3.4	-
Fluoranthene	206-44-0	100	mg/kg	64 D	-	52 D	-	63	-	70	-	70	-
Fluorene	86-73-7	30	mg/kg	5.6	-	6	-	8.4	-	13	-	7.3	-
Indeno(1,2,3-cd)Pyrene	193-39-5	0.5	mg/kg	19	-	12	-	19	-	18	-	16	-
Naphthalene	91-20-3	12	mg/kg	1.7	-	2.6	-	ND	-	7.3	-	1.8 J	-
Phenanthrene	85-01-8	100	mg/kg	42	-	45 D	-	43	-	70	-	55	-
Pyrene	129-00-0	100	mg/kg	54 D	-	39	-	49	-	54	-	52	-
Total SVOCs				**382.1**	**-**	**294.88**	**-**	**383.6**	**-**	**451.92**	**-**	**272.73**	**-**
Total PAHs (CP-51) [3]		**500**	**mg/kg**	**372.7**	**-**	**288.6**	**-**	**354.4**	**-**	**431.3**	**-**	**385.3**	**-**
Total RCRA Metals - Westborough Lab													
Arsenic, Total	7440-38-2	13	mg/kg	-	8	-	6.3	-	12	-	7.3	-	5.5
Barium, Total	7440-39-3	350	mg/kg	-	210	-	240	-	330	-	350	-	120
Cadmium, Total	7440-43-9	2.5	mg/kg	-	1.6	-	0.97	-	1.1	-	1.2	-	2.1
Chromium, Total	7440-47-3	--	mg/kg	-	15	-	12	-	17	-	12	-	15
Lead, Total	7439-92-1	63	mg/kg	-	790	-	560	-	2800	-	810	-	210
Mercury, Total	7439-97-6	0.18	mg/kg	-	0.44	-	1.5	-	0.89	-	5.7	-	1.8
Selenium, Total	7782-49-2	3.9	mg/kg	-	ND	-	0.25 J	-	1.1	-	0.35	-	0.15
Silver, Total	7440-22-4	2	mg/kg	-	0.9	-	0.22 J	-	0.29 J	-	0.43 J	-	ND

Notes:

1. Only compounds detected with reporting limits that exceed the corresponding regulatory standard in at least one sample are included on the summary sheets.
2. Unrestricted Use Soil Cleanup Objective per 6NYCRR Part 375.
3. In accordance with NYSDEC Soil Cleanup Guidance, Policy CP-51, compounds only include the total of those polycyclic aromatic hydrocarbons (PAHs) detected above the laboratory method detection limit.

Qualifier Key:

J Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses.
ND Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

Color Code:

= Concentration exceeds the individual Unrestricted Use Soil Cleanup Objective (SCO) or the CP-51 total PAH concentration of 500 ppm.

BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC

TABLE 5F

SUMMARY OF POST-REMEDIAL SOIL/FILL CONTAMINATION ABOVE UNRESTRICTED SCOs
AREA OF CONCERN (AOC) SB-20

Site Management Plan
154 South Ogden Street Site
Buffalo, New York

Compound [1]	CasNum	USCO [2]	Units	Sample Location, Depth, Date									
				SB-20-B-1 (5.0') 5/15/2013 L1308804-01	Qual	SB-20-SW-1 (1-5') 5/15/2013 L1308804-02	Qual	SB-20-SW-2 (1-5') 5/15/2013 L1308804-03	Qual	SB-20-SW-3 (1-5') 5/15/2013 L1308804-04	Qual	SB-20-SW-4 (1-5') 5/15/2013 L1308804-05	Qual
General Chemistry - Westborough Lab													
Solids, Total	NONE	--	%	84.8		85				79.9		82.4	
Semivolatile Organics by GC/MS - Westborough Lab													
2-Methylnaphthalene	91-57-6	--	mg/kg	0.14	J	ND		0.36	J	0.17	J	0.4	J
Acenaphthene	83-32-9	20	mg/kg	0.34		0.51	J	0.52		0.34		0.78	
Acenaphthylene	208-96-8	100	mg/kg	0.24		1.3		2.8		0.76		1.7	
Anthracene	120-12-7	100	mg/kg	1		2.4		3.6		1.5		4.4	
Benzo(a)anthracene	56-55-3	1	mg/kg	2		5.4		8.1		3.6		7.4	
Benzo(a)pyrene	50-32-8	1	mg/kg	1.6		5.4		15		3.2		5.5	
Benzo(b)fluoranthene	205-99-2	1	mg/kg	2.1		5.5		8.6		3.3		6.8	
Benzo(ghi)perylene	191-24-2	100	mg/kg	0.86		2.7		4.5		1.7		2.7	
Benzo(k)fluoranthene	207-08-9	0.8	mg/kg	1.1		2.6		4.7		3.2		3.9	
Biphenyl	92-52-4	--	mg/kg	ND		ND		ND		ND		0.13	J
Bis(2-Ethylhexyl)phthalate	117-81-7	--	mg/kg	ND		0.56	J	ND		ND		ND	
Carbazole	86-74-8	--	mg/kg	0.56		1.2		1.4		0.84		1.1	
Chrysene	218-01-9	1	mg/kg	2.1		5.7		9.8		3.8		7.1	
Di-n-butylphthalate	84-74-2	--	mg/kg	ND		1		ND		ND		ND	
Dibenzo(a,h)anthracene	53-70-3	0.33	mg/kg	0.26		0.75		1.8		0.5		0.85	
Dibenzofuran	132-64-9	7	mg/kg	0.32		0.57	J	0.84		0.35	J	1.2	
Fluoranthene	206-44-0	100	mg/kg	4.7		12		19	D	8		18	D
Fluorene	86-73-7	30	mg/kg	0.5		0.74	J	0.92		0.55		2	
Indeno(1,2,3-cd)Pyrene	193-39-5	0.5	mg/kg	1.1		3.3		5.4		2.1		3.8	
Naphthalene	91-20-3	12	mg/kg	0.29		0.42	J	0.74		0.33	J	0.58	
Phenanthrene	85-01-8	100	mg/kg	4.1		10		13		6		14	
Pyrene	129-00-0	100	mg/kg	3.6		10		15		6.6		13	
Total SVOCs				**26.91**		**72.05**		**116.08**		**46.84**		**95.34**	
Total PAHs (CP-51) [3]		**500**	**mg/kg**	**26.03**		**68.72**		**113.48**		**45.48**		**92.51**	
Total RCRA Metals - Westborough Lab													
Arsenic, Total	7440-38-2	13	mg/kg	6.7		9.5		9.3		12		44	
Barium, Total	7440-39-3	350	mg/kg	200		260		260		450		120	
Cadmium, Total	7440-43-9	2.5	mg/kg	0.82		1.2		1.2		1.8		1.7	
Chromium, Total	7440-47-3	--	mg/kg	13		12		13		24		120	
Lead, Total	7439-92-1	63	mg/kg	1500		2000		2200		1900		420	
Mercury, Total	7439-97-6	0.18	mg/kg	0.12		1.3		1.2		1.2		0.099	J
Selenium, Total	7782-49-2	3.9	mg/kg	ND		0.6	J	0.41	J	0.32	J	ND	
Silver, Total	7440-22-4	2	mg/kg	0.13	J	0.1	J	0.23	J	0.3	J	0.24	J

Notes:

1. Only compounds detected with reporting limits that exceed the corresponding regulatory standard in at least one sample are included on the summary sheets.
2. Unrestricted Use Soil Cleanup Objective per 6NYCRR Part 375.
3. In accordance with NYSDEC Soil Cleanup Guidance, Policy CP-51, compounds only include the total of those polycyclic aromatic hydrocarbons (PAHs) detected above the laboratory method detection limit.

Qualifier Key:

J Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses.
ND Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

Color Code:

= Concentration exceeds the individual Unrestricted Use Soil Cleanup Objective (SCO) or the CP-51 total PAH concentration of 500 ppm.

BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC

TABLE 5G

SUMMARY OF POST-REMEDIAL SOIL/FILL CONTAMINATION ABOVE UNRESTRICTED SCOs
AREA OF CONCERN (AOC) SB-27

Site Management Plan
154 South Ogden Street Site
Buffalo, New York

Compound [1]	CasNum	USCO [2]	Units	Location, Sample ID, & Sample Date											
				BOTTOM		NORTH		NORTH		EAST		SOUTH		WEST	
				SB-27-B-1 (5.0') 5/31/2013	Qual	SB-27-SW-1 (3-4') 5/31/2013	Qual	SB-27-SW-6 (3-4') 6/26/2013	Qual	SB-27-SW-2 (3-4') 5/31/2013	Qual	SB-27-SW-3 (3-4') 5/31/2013	Qual	SB-27-SW-4 (3-4') 5/31/2013	Qual
General Chemistry - Westborough Lab															
Solids, Total	NONE	--	%	80.3		64		55.6		64.6		67.5		68.2	
Semivolatile Organics by GC/MS (PAHs in blue)		--													
Acenaphthene	83-32-9	20	mg/kg	0.16	U	0.21	U	0.23	U	0.2	U	0.2	U	0.19	U
Acenaphthylene	208-96-8	100	mg/kg	0.16	U	0.21	U	0.23	U	0.2	U	0.2	U	0.19	U
Anthracene	120-12-7	100	mg/kg	0.12	U	0.16	U	0.18	U	0.087	J	0.15	U	0.14	U
Benzo(a)anthracene	56-55-3	1	mg/kg	0.12	U	0.16	U	0.18	U	0.35		0.15	U	0.05	J
Benzo(a)pyrene	50-32-8	1	mg/kg	0.16	U	0.21	U	0.23	U	0.3		0.2	U	0.19	U
Benzo(b)fluoranthene	205-99-2	1	mg/kg	0.12	U	0.16	U	0.18	U	0.46		0.15	U	0.079	J
Benzo(ghi)perylene	191-24-2	100	mg/kg	0.16	U	0.21	U	0.23	U	0.18	J	0.2	U	0.19	U
Benzo(k)fluoranthene	207-08-9	0.8	mg/kg	0.12	U	0.16	U	0.18	U	0.2		0.15	U	0.14	U
Carbazole	86-74-8	--	mg/kg	0.2	U	0.26	U	0.29	U	0.25	U	0.24	U	0.24	U
Chrysene	218-01-9	1	mg/kg	0.12	U	0.16	U	0.18	U	0.36		0.15	U	0.061	J
Dibenzo(a,h)anthracene	53-70-3	0.33	mg/kg	0.12	U	0.16	U	0.18	U	0.055	J	0.15	U	0.14	U
Dibenzofuran	132-64-9	7	mg/kg	0.2	U	0.26	U	0.29	U	0.25	U	0.24	U	0.24	U
Fluoranthene	206-44-0	100	mg/kg	0.12	U	0.16	U	0.18	U	0.73		0.15	U	0.095	J
Fluorene	86-73-7	30	mg/kg	0.2	U	0.26	U	0.29	U	0.25	U	0.24	U	0.24	U
Indeno(1,2,3-cd)Pyrene	193-39-5	0.5	mg/kg	0.16	U	0.21	U	0.23	U	0.18	J	0.2	U	0.19	U
Phenanthrene	85-01-8	100	mg/kg	0.12	U	0.16	U	0.18	U	0.29		0.15	U	0.056	J
Pyrene	129-00-0	100	mg/kg	0.12	U	0.16	U	0.18	U	0.57		0.15	U	0.081	J
Total PAHs (CP-51) [3]		***500***	***mg/kg***	**0**		**0**		**0**		**3.762**		**0**		**0.422**	
Total Metals - Westborough Lab		--													
Arsenic, Total	7440-38-2	13	mg/kg	5.3		17		12		19		14		17	
Barium, Total	7440-39-3	350	mg/kg	58		2300		700		580		1200		580	
Cadmium, Total	7440-43-9	2.5	mg/kg	0.53		7.6		0.82		3.5		4.3		2.4	
Chromium, Total	7440-47-3	--	mg/kg	11		72		16		46		51		24	
Lead, Total	7439-92-1	63	mg/kg	21		4000		1000		570		1200		1200	
Mercury, Total	7439-97-6	0.18	mg/kg	0.04	J	0.58		0.15	U	0.27		0.03	J	0.22	
Selenium, Total	7782-49-2	3.9	mg/kg	0.2	J	1	J	0.33	J	0.91	J	1.2	U	0.39	J
Silver, Total	7440-22-4	2	mg/kg	0.49	U	38		0.22	J	1.4		3.5		1.9	

Notes:

1. Only compounds detected with reporting limits that exceed the corresponding regulatory standard in at least one sample are included on the summary sheets.
2. Unrestricted Use Soil Cleanup Objective per 6NYCRR Part 375.
3. In accordance with NYSDEC Soil Cleanup Guidance, Policy CP-51, compounds only include the total of those polycyclic aromatic hydrocarbons (PAHs) detected above the laboratory method detection limit.

Qualifier Key:

D Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
J Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses.
U Not detected at the reported detection limit for the sample.

Color Code:

= Concentration exceeds the individual Unrestricted Use Soil Cleanup Objective (SCO) or the CP-51 total PAH concentration of 500 ppm.

BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC

TABLE 5H

SUMMARY OF POST-REMEDIAL SOIL/FILL CONTAMINATION ABOVE UNRESTRICTED SCOs
AREA OF CONCERN (AOC) SB-36

Site Management Plan
154 South Ogden Street Site
Buffalo, New York

Compound [1]	CasNum	USCO [2]	Units	Location, Sample ID, & Sample Date									
				BOTTOM		NORTH		EAST		SOUTH		WEST	
				SB-36-B-2 (3.5') 6/14/2013	Qual	SB-36-SW-5 (0-2') 6/14/2013	Qual	SB-36-SW-6 (0-2') 6/14/2013	Qual	SB-36-SW-7 (0-2') 6/14/2013	Qual	SB-36-SW-8 (0-2') 6/14/2013	Qual
General Chemistry - Westborough Lab													
Solids, Total	NONE	--	%	71		90		77		77		58	
Semivolatile Organics by GC/MS (PAHs in blue)		--											
Acenaphthene	83-32-9	20	mg/kg	1.2	J	2.1		1.9		1.7	J	0.23	U
Acenaphthylene	208-96-8	100	mg/kg	3.4	J	1.0	J	4.9		1.7	J	0.23	U
Anthracene	120-12-7	100	mg/kg	5.7	J	5.2		8.7		6		0.17	U
Benzo(a)anthracene	56-55-3	1	mg/kg	19		14		28		16		0.17	U
Benzo(a)pyrene	50-32-8	1	mg/kg	16		12		25		14		0.23	U
Benzo(b)fluoranthene	205-99-2	1	mg/kg	19		6.2		32		18		0.17	U
Benzo(ghi)perylene	191-24-2	100	mg/kg	9.7		6.3		15		9.1		0.23	U
Benzo(k)fluoranthene	207-08-9	0.8	mg/kg	9.2		6.2		12		6.5		0.17	U
Carbazole	86-74-8	--	mg/kg	2	J	4.2		4.2		2.5	J	0.28	U
Chrysene	218-01-9	1	mg/kg	18		2.3		31		17		0.17	U
Dibenzo(a,h)anthracene	53-70-3	0.33	mg/kg	2.4	J	1.9		4.1		2.5		0.17	U
Dibenzofuran	132-64-9	7	mg/kg	5.8	U	1.3	J	1.6	J	1.5	J	0.28	U
Fluoranthene	206-44-0	100	mg/kg	35		28		60		32		0.088	J
Fluorene	86-73-7	30	mg/kg	1.7	J	2.1		2.4		2.3	J	0.28	U
Indeno(1,2,3-cd)Pyrene	193-39-5	0.5	mg/kg	10		7.4		16		9.1		0.23	U
Phenanthrene	85-01-8	100	mg/kg	21		21		34		28		0.17	U
Pyrene	129-00-0	100	mg/kg	30		22		55		27		0.063	J
Total PAHs (CP-51) [3]		***500***	***mg/kg***	**201.3**		**137.7**		**330**		**190.9**		**0.151**	
Total Metals - Westborough Lab		--											
Arsenic, Total	7440-38-2	13	mg/kg	38		4.9		19		13		12	
Barium, Total	7440-39-3	350	mg/kg	400		280		420		330		790	
Cadmium, Total	7440-43-9	2.5	mg/kg	3.6		0.84		1.2		1.8		3.6	
Chromium, Total	7440-47-3	--	mg/kg	29		8.4		29		13		29	
Lead, Total	7439-92-1	63	mg/kg	1200		290		870		1300		2700	
Mercury, Total	7439-97-6	0.18	mg/kg	2.1		0.22		0.98		0.89		1.0	
Selenium, Total	7782-49-2	3.9	mg/kg	0.65	J	0.86	U	0.51	J	0.49	J	0.72	J
Silver, Total	7440-22-4	2	mg/kg	0.88		0.58		0.46	J	0.16	J	0.90	

Notes:

1. Only compounds detected with reporting limits that exceed the corresponding regulatory standard in at least one sample are included on the summary sheets.
2. Unrestricted Use Soil Cleanup Objective per 6NYCRR Part 375.
3. In accordance with NYSDEC Soil Cleanup Guidance, Policy CP-51, compounds only include the total of those polycyclic aromatic hydrocarbons (PAHs) detected above the laboratory method detection limit.

Qualifier Key:

D Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
J Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses.
U Not detected at the reported detection limit for the sample.

Color Code:

= Concentration exceeds the individual Unrestricted Use Soil Cleanup Objective (SCO) or the CP-51 total PAH concentration of 500 ppm.

BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC

TABLE 5I

SUMMARY OF POST-REMEDIAL SOIL/FILL CONTAMINATION ABOVE UNRESTRICTED SCOs
AREA OF CONCERN (AOC) SB-69

Site Management Plan
154 South Ogden Street Site
Buffalo, New York

Compound	CasNum	USCO [1]	Units	Sample Location and Date of Collecction [2]			
				NORTH	EAST	SOUTH	WEST
				SB-69-SW-16 12/10/2013 Qual	SB-69-SW-17 12/23/2013 Qual	SB-69-SW-18 12/23/2013 Qual	SB-69-25 12/23/2013 Qual
General Chemistry - Westborough Lab							
Solids, Total	NONE	--	%	81	76	76	77.9
Total Metals - Westborough Lab							
Arsenic, Total	7440-38-2	13	mg/kg	13	13	8.8	9.7
Lead, Total	7439-92-1	63	mg/kg	770	520	410	480

Notes:

1. Unrestricted Use Soil Cleanup Objective per 6NYCRR Part 375.
2. East sidewall locations SB69-SW-20 and 23 as well as southern sidewall samples SB69-SW-21 and 24 did not require laboratory analysis because radially inward samples SB69-SW-17 and 18, respectively, reported arsenic and lead concentrations below their respective ISCOs, making analysis of these samples unnecessary.

Color Code:

= Concentration exceeds the individual Unrestricted Use Soil Cleanup Objective (SCO) or the CP-51 total PAH concentration of 500 ppm.

BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC

TABLE 5J

SUMMARY OF POST-REMEDIAL SOIL/FILL CONTAMINATION ABOVE UNRESTRICTED SCOs
AREA OF CONCERN (AOC) SS-06

Site Management Plan
154 South Ogden Street Site
Buffalo, New York

Compound [1]	CasNum	USCO [2]	Units	BOTTOM SS-6-B-2 (3.0') 6/14/2013	Qual	NORTH SS-6-SW-1 5/31/2013	Qual	EAST SS-6-SW-2 5/31/2013	Qual	SOUTH SS-6-SW-3 5/31/2013	Qual	WEST SS-6-SW-4 5/31/2013	Qual
General Chemistry - Westborough Lab													
Solids, Total	NONE	--	%	75		74.3		69.3		83.8		80.2	
Semivolatile Organics by GC/MS (PAHs in blue)		--											
Acenaphthene	83-32-9	20	mg/kg	0.14	U	0.2		0.19	U	0.15	U	0.21	J
Acenaphthylene	208-96-8	100	mg/kg	0.18	J	0.13	J	0.19	U	0.15	U	0.5	
Anthracene	120-12-7	100	mg/kg	0.36	J	0.42		0.14	U	0.12	U	0.74	
Benzo(a)anthracene	56-55-3	1	mg/kg	1.1		0.91		0.057	J	0.12	U	1.8	
Benzo(a)pyrene	50-32-8	1	mg/kg	0.88		0.77		0.19	U	0.15	U	1.5	
Benzo(b)fluoranthene	205-99-2	1	mg/kg	1.2		1.1		0.075	J	0.12	U	2.2	
Benzo(ghi)perylene	191-24-2	100	mg/kg	0.55		0.43		0.19	U	0.15	U	0.88	
Benzo(k)fluoranthene	207-08-9	0.8	mg/kg	0.51		0.39		0.14	U	0.12	U	0.77	
Carbazole	86-74-8	--	mg/kg	0.18	J	0.19	J	0.24	U	0.19	U	0.36	J
Chrysene	218-01-9	1	mg/kg	1.1		0.85		0.068	J	0.12	U	1.8	
Dibenzo(a,h)anthracene	53-70-3	0.33	mg/kg	0.14		0.13		0.14	U	0.12	U	0.23	J
Dibenzofuran	132-64-9	7	mg/kg	0.22	U	0.15	J	0.24	U	0.19	U	0.15	J
Fluoranthene	206-44-0	100	mg/kg	2		1.9		0.11	J	0.059	J	3.9	
Fluorene	86-73-7	30	mg/kg	0.19	U	0.22		0.24	U	0.19	U	0.23	J
Indeno(1,2,3-cd)Pyrene	193-39-5	0.5	mg/kg	0.59		0.41		0.19	U	0.15	U	0.82	
Phenanthrene	85-01-8	100	mg/kg	1.3		1.5		0.11	J	0.041	J	2.6	
Pyrene	129-00-0	100	mg/kg	1.6		1.6		0.097	J	0.05	J	3.2	
Total PAHs (CP-51) [3]		***500***	***mg/kg***	**12.1**		**10.96**		**0.517**		**0.091**		**21.38**	
Total Metals - Westborough Lab													
Arsenic, Total	7440-38-2	13	mg/kg	14		13		37		5.7		13	
Barium, Total	7440-39-3	350	mg/kg	440		340		730		100		460	
Cadmium, Total	7440-43-9	2.5	mg/kg	2.9		2		9.9		1.2		2.7	
Chromium, Total	7440-47-3	--	mg/kg	22		26		38		11		45	
Lead, Total	7439-92-1	63	mg/kg	980		1300		690		120		680	
Mercury, Total	7439-97-6	0.18	mg/kg	0.96		0.39		0.24		0.04	J	0.86	
Selenium, Total	7782-49-2	3.9	mg/kg	1.0	U	0.63	J	2.9		0.19	J	0.85	J
Silver, Total	7440-22-4	2	mg/kg	5.0		0.82		2.9		0.25	J	0.88	

Notes:

1. Only compounds detected with reporting limits that exceed the corresponding regulatory standard in at least one sample are included on the summary sheets.
2. Unrestricted Use Soil Cleanup Objective per 6NYCRR Part 375.
3. In accordance with NYSDEC Soil Cleanup Guidance, Policy CP-51, compounds only include the total of those polycyclic aromatic hydrocarbons (PAHs) detected above the laboratory method detection limit.

Qualifier Key:

D Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
J Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses.
U Not detected at the reported detection limit for the sample.

Color Code:

= Concentration exceeds the individual Unrestricted Use Soil Cleanup Objective (SCO) or the CP-51 total PAH concentration of 500 ppm.

BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC

TABLE 6

CRITERIA FOR IMPORTED SOILS

Site Management Plan
154 South Ogden Street Site
Buffalo, New York

Parameter	Soil Criteria[1]
Volatile Organic Compounds (mg/kg)	
1,1,1-Trichloroethane	0.68
1,1-Dichloroethane	0.27
1,1-Dichloroethene	0.33
1,2-Dichlorobenzene	1.1
1,2-Dichloroethane	0.02
1,2-Dichloroethene(cis)	0.25
1,2-Dichloroethene(trans)	0.19
1,3-Dichlorobenzene	2.4
1,4-Dichlorobenzene	1.8
1,4-Dioxane	0.1
Acetone	0.05
Benzene	0.06
Butylbenzene	12
Carbon tetrachloride	0.76
Chlorobenzene	1.1
Chloroform	0.37
Ethylbenzene	1
Hexachlorobenzene	3.2
Methyl ethyl ketone	0.12
Methyl tert-butyl ether	0.93
Methylene chloride	0.05
Propylbenzene-n	3.9
Sec-Butylbenzene	11
Tert-Butylbenzene	5.9
Tetrachloroethene	1.3
Toluene	0.7
Trichloroethene	0.47
Trimethylbenzene-1,2,4	3.6
Trimethylbenzene-1,3,5	8.4
Vinyl chloride	0.02
Xylene (mixed)	1.6
Semi-Volatile Organic Compounds (mg/kg)	
Acenaphthene	98
Acenaphthylene	107
Anthracene	500
Benzo(a)anthracene	1
Benzo(a)pyrene	1
Benzo(b)fluoranthene	1.7
Benzo(g,h,i)perylene	500
Benzo(k)fluoranthene	1.7
Chrysene	1
Dibenz(a,h)anthracene	0.56
Fluoranthene	500
Fluorene	386
Indeno(1,2,3-cd)pyrene	5.6
m-Cresol(s)	0.33
Naphthalene	12
o-Cresol(s)	0.33
p-Cresol(s)	0.33
Pentachlorophenol	0.8
Phenanthrene	500

BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC

TABLE 6

CRITERIA FOR IMPORTED SOILS

Site Management Plan
154 South Ogden Street Site
Buffalo, New York

Parameter	Soil Criteria[1]
Phenol	0.33
Pyrene	500
Metals (mg/kg)	
Arsenic	16
Barium	400
Beryllium	47
Cadmium	7.5
Chromium, Hexavalent[2]	19
Chromium, Trivalent[2]	1500
Copper	270
Cyanide	27
Lead	450
Manganese	2000
Mercury (total)	0.73
Nickel	130
Selenium	4
Silver	8.3
Zinc	2480
PCBs/Pesticides (mg/kg)	
2,4,5-TP Acid (Silvex)	3.8
4,4'-DDE	17
4,4'-DDT	47
4,4'-DDD	14
Aldrin	0.19
Alpha-BHC	0.002
Beta-BHC	0.009
Chlordane (alpha)	2.9
Delta-BHC	0.25
Dibenzofuran	210
Dieldrin	0.1
Endosulfan I	102
PCBs/Pesticides (mg/kg)	
Endosulfan II	102
Endosulfan sulfate	200
Endrin	0.06
Heptachlor	0.38
Lindane	0.1
Polychlorinated biphenyls	1

Notes:

1. Soil criteria are lesser of concentrations protective of groundwater or commercial health-based soil cleanup objectives per 6 NYCRR 375-6.8(b).
2. The SCO for Hexavalent or Trivalent Chromium is considered to be met if the analysis for the total species of this contaminant is below the specific SCO for Hexavalent Chromium.

FIGURES

F:\CAD\Benchmark\154 South Ogden LLC (SBCS) (Site No. C915288)\Site Management Plan\Figure 1- Site Plan, Boundaries, and Cross-Sections.dwg

BUFFALO RIVER (2012)

BUFFALO SEWER AUTHORITY
5' WIDE OUTFALL #052

SG-1

A

A'

B

B'

± 6.3 ACRE
NON-BCP AREA

24" GASLINE
20" GASLINE

CITY OF BUFFALO
SBL 123.15-1-5

154 SOUTH OGDEN LLC
SBL 123.15-1-4

NIAGARA MOHAWK
SBL 123.15-1-9

CITY OF BUFFALO
SBL 123.15-1-6

THEODORE ZEMBATY
SBL 123.15-1-7.2

THEODORE ZEMBATY
SBL 123.15-1-8

THEODORE ZEMBATY
SBL 123.15-1-7.1

NEW SOFTBALL FIELD

NEW SOCCER FIELD

NEW BASEBALL FIELD

DRIVE & BUS PARKING

PARKING

SOUTH OGDEN STREET

MINERAL SPRINGS ROAD

APPROX. BUFFALO RIVER CHANNEL (1927)

MW-1 MW-2 MW-2R MW-3 MW-4 MW-5

SS-1 SS-2 SS-3 SS-4 SS-5 SS-6 SS-7 SS-8

SB-1 SB-2 SB-3 SB-4 SB-5 SB-6 SB-7 SB-8 SB-9 SB-10 SB-11 SB-12 SB-13 SB-14 SB-15 SB-16 SB-17 SB-18 SB-19 SB-20 SB-21 SB-22 SB-23 SB-24 SB-25 SB-26 SB-27 SB-28 SB-29 SB-30 SB-31 SB-32 SB-33 SB-34 SB-35 SB-36 SB-37 SB-38

SB-40 SB-41 SB-42 SB-43 SB-44 SB-45 SB-46 SB-47 SB-48 SB-49 SB-50 SB-51 SB-52 SB-53 SB-54 SB-55 SB-56 SB-57 SB-58

SB-59 SB-60 SB-61 SB-62 SB-63 SB-64 SB-65 SB-66 SB-67 SB-68 SB-69 SB-70

TW-01 (SB-1) TW-02 (SB-2) TW-03 (SB-4) TW-04 (SB-48) TW-05 (SB-49) TW-06 (SB-50) TW-07 (SB-51) TW-08 (SB-52)

TP-01-2012 TP-02-2012 TP-03-2012 TP-04-2012 TP-05-2012 TP-06-2012 TP-07-2012 TP-08-2012 TP-09-2012 TP-10-2012 TP-11-2012 TP-12-2012 TP-13-2012 TP-14-2012 TP-15-2012 TP-16-2012 TP-17-2012 TP-18-2012 TP-19-2012 TP-20-2012

LEGEND:

- PROPERTY BOUNDARY
- PARCEL BOUNDARY
- BCP BOUNDARY
- APPROX. HIGH PRESSURE GAS MAIN AND 25' EASEMENT
- SCHOOL BUILDING
- OTHER IMPROVEMENTS
- APPROX. FORMER BUFFALO RIVER CHANNEL (1927 AERIAL)
- APPROX. FORMER BUFFALO RIVER CHANNEL (BISSELL STONE SURVEY, 10-4-11)
- SS-1 RI SURFACE (0-6") SAMPLE LOCATION
- SB-17 RI SOIL BORING & NEAR SURFACE (0-2') SAMPLE LOCATION
- SB-9 RI SOIL BORING LOCATION
- MW-1 RI GROUNDWATER MONITORING WELL
- SG-1 STAFF GAUGE LOCATION (BUFFALO RIVER)
- MW-2 DECOMMISSIONED MONITORING WELL
- SB-58 WASTE CHARACTERIZATION LOCATION
- SB-6 BORING LOCATION (BENCHMARK 2012)
- TP-10-2012 PHASE II TEST PIT LOCATION (BENCHMARK 2012)
- TW-02 (SB-2) TEMPORARY MONITORING WELL LOCATION (BM 2012)
- SB-40 SUPPLEMENTAL RI SOIL BORING LOCATION
- TW-04 (SB-48) SUPPLEMENTAL TEMPORARY WELL LOCATION
- SB-59 SUPPLEMENTAL RI SOIL NEAR-SURFACE (0-2') SAMPLE LOCATION
- HYDROGEOLOGIC CROSS-SECTION

N

150' 0' 150' 300'

SCALE: 1 INCH = 150 FEET
SCALE IN FEET
(approximate)

DATE: AUGUST 2014
DRAFTED BY: BCH

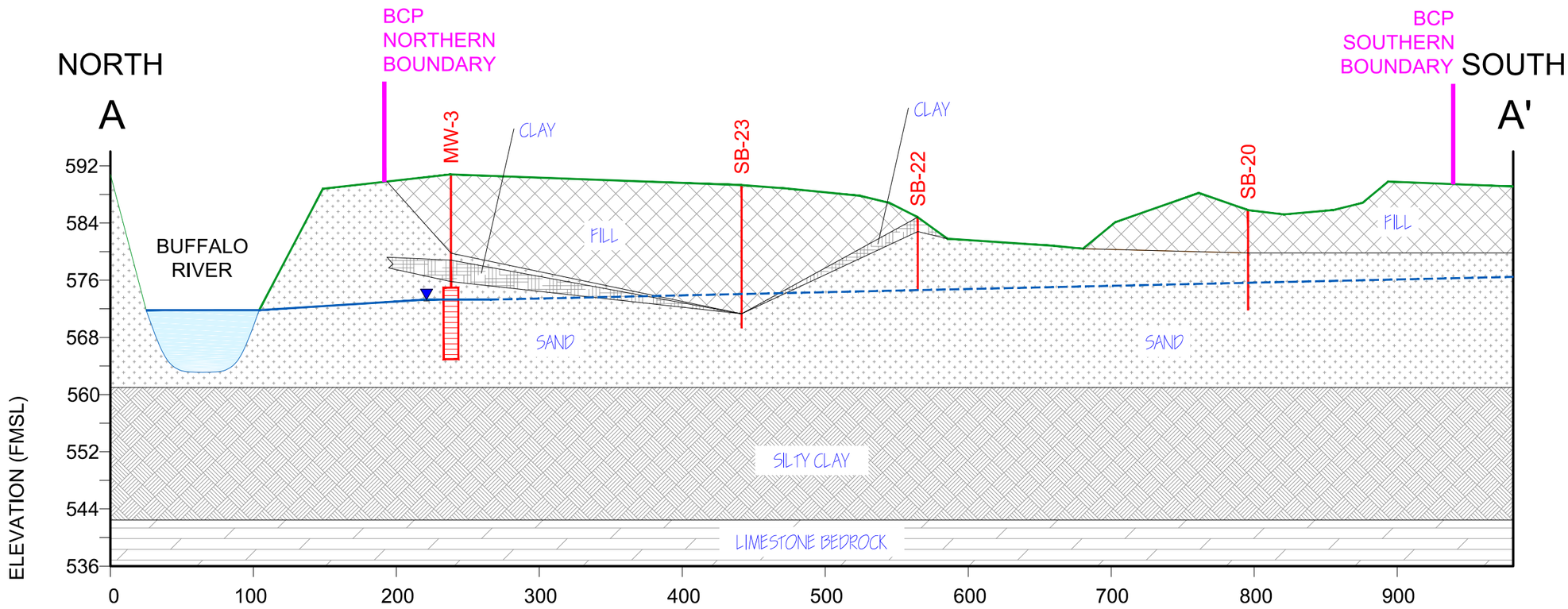
BENCHMARK
ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC
2558 HAMBURG TURNPIKE
SUITE 300
BUFFALO, NY 14218
(716) 856-0599

JOB NO.: 0249-012-011

SITE PLAN, BOUNDARIES, & CROSS-SECTIONS

SITE MANAGEMENT PLAN
154 SOUTH OGDEN STREET SITE
BUFFALO, NEW YORK
PREPARED FOR
154 SOUTH OGDEN, LLC

FIGURE 1



SCALE: AS SHOWN (X: 1" = 120' AND Y: 1" = 24')

LEGEND:

MW-3, SB-23	RI GROUNDWATER MONITORING WELL OR SOIL BORING LOCATION		SANDY LEAN CLAY
▼	APPROXIMATE WATER TABLE ELEVATION (DASHED WHERE INFERRED)		SAND
	MONITORING WELL SCREEN INTERVAL		TILL
— — —	INFERRED BOUNDARY		BEDROCK
	FILL		BUFFALO RIVER

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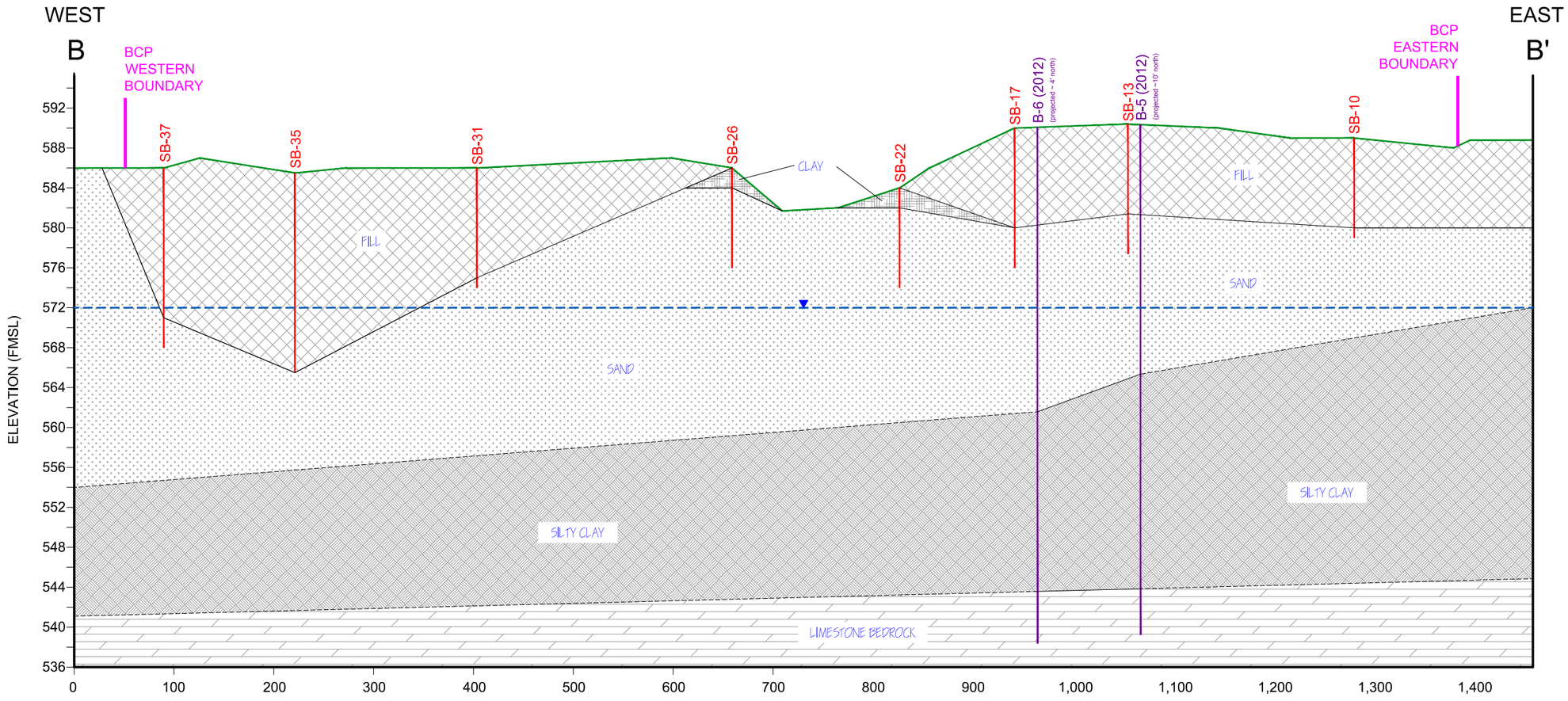
HYDROGEOLOGIC CROSS SECTION A-A'

SITE MANAGEMENT PLAN
154 SOUTH OGDEN STREET SITE
BUFFALO, NEW YORK
PREPARED FOR
154 SOUTH OGDEN, LLC

FIGURE 2



HORIZONTAL DISTANCE (FEET)

SCALE: AS SHOWN (X: 1" = 120' AND Y: 1" = 12')

LEGEND:

SB-23	RI SOIL BORING LOCATION		FILL
B-5 (2012) (projected ~10' north)	GEOTECHNICAL SOIL BORING LOCATION (BY OTHERS)		SANDY LEAN CLAY
▼	APPROXIMATE WATER TABLE ELEVATION (DASHED WHERE INFERRED)		SAND
– – – –	INFERRED BOUNDARY		TILL
			BEDROCK

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HYDROGEOLOGIC CROSS SECTION B-B'

SITE MANAGEMENT PLAN
154 SOUTH OGDEN STREET SITE
BUFFALO, NEW YORK
PREPARED FOR
154 SOUTH OGDEN, LLC

FIGURE 3

F:\CAD\Benchmark\154 South Ogden LLC (SBCS) (Site No. C915268)\Site Management Plan\Figure 4; Isopotential Map (Aug 2013).dwg

BUFFALO RIVER (2012)

BUFFALO SEWER AUTHORITY
5' WIDE OUTFALL #052

SG-1
571.4

24" GASLINE
20" GASLINE

572

MW-5
572.0

MW-3
572.2

MW-1
572.4

DRIVE & BUS PARKING

NEW
SOFTBALL FIELD

572.5

154 SOUTH OGDEN LLC
SBL 123.15-1-4

NEW
SOCCER FIELD

NEW
BASEBALL FIELD

SOUTH OGDEN STREET

PARKING

573

MW-2R

MW-2
(decommissioned 08/16/13)
573.4

573.5

MW-4
572.6

CITY OF BUFFALO
SBL 123.15-1-6

THEODORE ZEMBATY
SBL 123.15-1-7.2

THEODORE ZEMBATY
SBL 123.15-1-8

NIAGARA MOHAWK
SBL 123.15-1-9

THEODORE ZEMBATY
SBL 123.15-1-7.1

MINERAL SPRINGS ROAD

CITY OF BUFFALO
SBL 123.15-1-5

NIAGARA MOHAWK
SBL 123.15-1-9

LEGEND:

- PROPERTY BOUNDARY
- PARCEL BOUNDARY
- BCP BOUNDARY
- APPROX. HIGH PRESSURE GAS MAIN AND 25' EASEMENT
- SCHOOL BUILDING
- OTHER IMPROVEMENTS
- MW-1 572.4 — RI MONITORING WELL WITH GROUNDWATER ELEVATION FROM AUGUST 5, 2013

N

150' 0' 150' 300'

SCALE: 1 INCH = 150 FEET
SCALE IN FEET
(approximate)

DATE: AUGUST 2014
DRAFTED BY: BCH

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JOB NO.: 0249-012-011

GROUNDWATER ISOPOTENTIAL MAP AUGUST 5, 2013

SITE MANAGEMENT PLAN
154 SOUTH OGDEN STREET SITE
BUFFALO, NEW YORK
PREPARED FOR
154 SOUTH OGDEN, LLC

FIGURE 4

F:\CAD\Benchmark\154 South Ogden LLC (SBCS) (Site No. C915268)\Site Management Plan\Figure 5; Extent of Remedial Excavation Performed.dwg

N

150' 0' 150' 300'

SCALE: 1 INCH = 150 FEET
SCALE IN FEET
(approximate)

BUFFALO RIVER (2012)

BUFFALO SEWER AUTHORITY
5' WIDE OUTFALL #052

SG-1

24" GASLINE
20" GASLINE

CITY OF BUFFALO
SBL 123.15-1-3

± 6.3 ACRE
NON-BCP AREA

MW-5

SB-36: PAH-IMPACTED AOC
APPROX. DEPTH = ± 2 FBGS
DISPOSAL: 122.40 TONS

NEW
SOFTBALL FIELD

154 SOUTH OGDEN, LLC
SBL 123.15-1-4

SB-27: METALS-IMPACTED AOC
APPROX. DEPTH = ± 5 FBGS
DISPOSAL: 94.01 TONS

NEW
SOCCER FIELD

NEW
BASEBALL FIELD

SS-6: METALS-IMPACTED AOC
APPROX. DEPTH = ± 2 FBGS
DISPOSAL: 87.46 TONS

NIAGARA MOHAWK
SBL 123.15-1-9

SS-69: METALS-IMPACTED AOC
APPROX. DEPTH = ± 2 FBGS
DISPOSAL: 409.01 TONS

MW-4

MW-3

MW-1

SB-16: PAH-IMPACTED AOC
APPROX. DEPTH = ± 4 FBGS
DISPOSAL: 80.43 TONS

DRIVE & BUS PARKING

SB-14: BUILDING FOOTPRINT AOC
APPROX. DEPTH = ± 6 FBGS
DISPOSAL: 255.13 TONS

COLUMN PILE LINE M5: ASPHALT DEBRIS
DISPOSAL: 23.67 TONS

SOUTH OGDEN STREET

PARKING

TW-03 (SB-4): PETROLEUM-IMPACTED AOC
BENCHING LIMITS

MW-2R

MW-2
(decommissioned 08/16/13)

SB-20: METALS-IMPACTED AOC
APPROX. DEPTH = ± 5 FBGS
DISPOSAL: 86.08 TONS

CITY OF BUFFALO
SBL 123.15-1-6

TW-03 (SB-4): PETROLEUM-IMPACTED AOC
APPROXIMATE DEPTH = ± 17 FBGS
DISPOSAL: 651.72 TONS

THEODORE ZEMBATY
SBL 123.15-1-7.2

THEODORE ZEMBATY
SBL 123.15-1-8

NIAGARA MOHAWK
SBL 123.15-1-9

THEODORE ZEMBATY
SBL 123.15-1-7.1

MINERAL SPRINGS ROAD

LEGEND:

- PROPERTY BOUNDARY
- PARCEL BOUNDARY
- BCP BOUNDARY
- APPROX. HIGH PRESSURE GAS MAIN AND 25' EASEMENT
- SCHOOL BUILDING
- OTHER IMPROVEMENTS
- AOC EXCAVATION (AS-BUILT)
- MW-1 — RI GROUNDWATER MONITORING WELL
- SG-1 — RI STAFF GAUGE LOCATION (BUFFALO RIVER)
- SB-69 / SS-06 — RI SOIL BORING OR SURFACE SOIL LOCATION
- SB69-SW1 (0-2') — CONFIRMATION SOIL/FILL SAMPLE LOCATION EXCEEDING PART 375 RRSCO (SW=SIDEWALL, B=BOTTOM)
- SB69-SW25 (0-2') — CONFIRMATION SOIL/FILL SAMPLE LOCATION BELOW PART 375 RRSCO (SW=SIDEWALL, B=BOTTOM)
- SB69-SW20 (0-2') — CONFIRMATION SOIL/FILL SAMPLE LOCATION NOT ANALYZED (SW=SIDEWALL)

DATE: AUGUST 2014
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SUITE 300
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(716) 856-0599

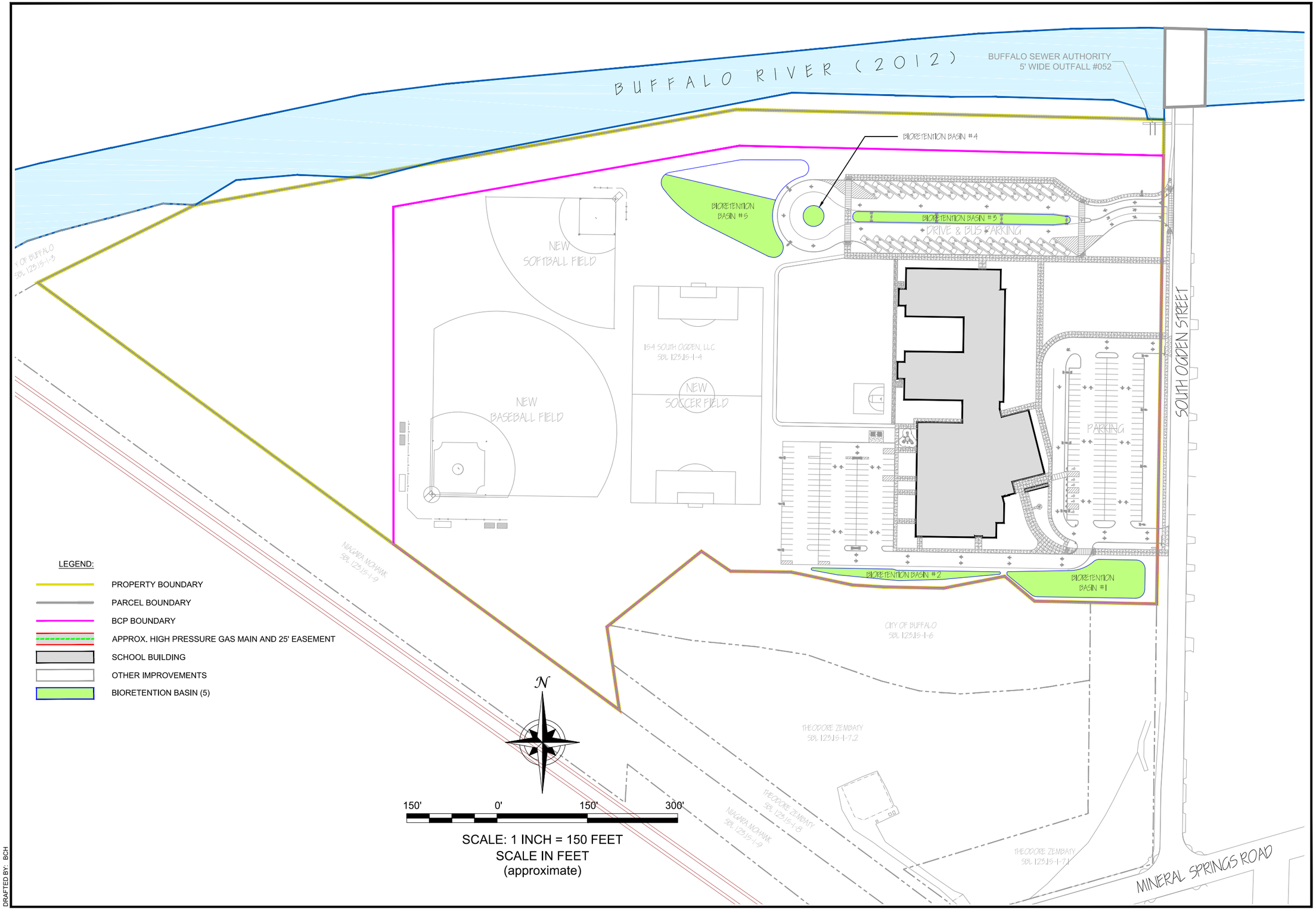
JOB NO.: 0249-012-011

EXTENT OF REMEDIAL EXCAVATIONS PERFORMED

SITE MANAGEMENT PLAN
154 SOUTH OGDEN STREET SITE
BUFFALO, NEW YORK
PREPARED FOR
154 SOUTH OGDEN, LLC

FIGURE 5

F:\CAD\Benchmark\154 South Ogden LLC (SBCS) (Site No. C915268)\Site Management Plan\Figure 6; Bioretential Basin Location Map.dwg



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ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC
2558 HAMBURG TURNPIKE
SUITE 300
BUFFALO, NY 14218
(716) 856-0599

JOB NO.: 0249-012-011

BIORETENTION BASIN LOCATION MAP

SITE MANAGEMENT PLAN
154 SOUTH OGDEN STREET SITE
BUFFALO, NEW YORK
PREPARED FOR
154 SOUTH OGDEN, LLC

FIGURE 6

APPENDIX A

METES AND BOUNDS

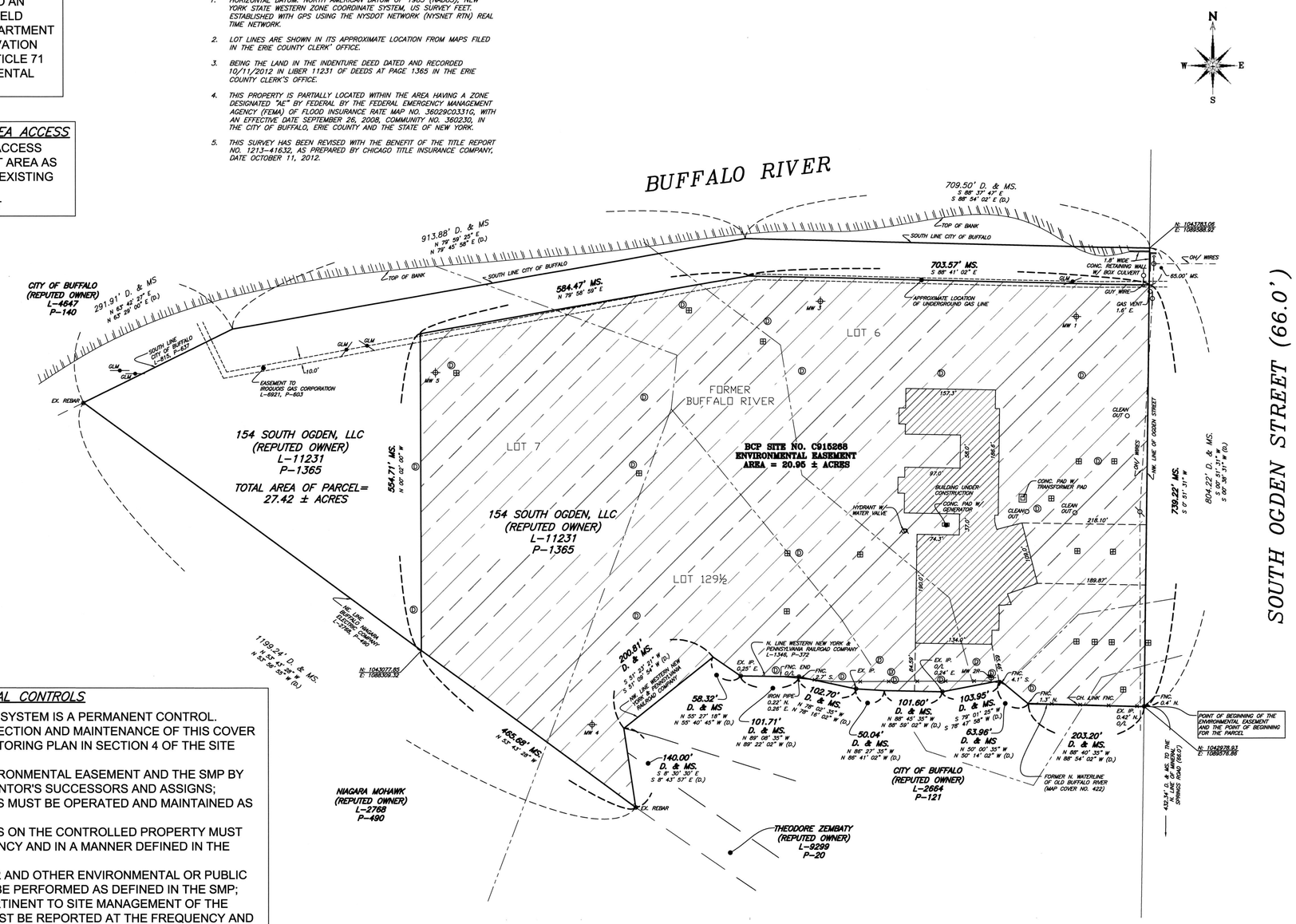
THIS PROPERTY IS SUBJECT TO AN ENVIRONMENTAL EASEMENT HELD BY THE NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION PURSUANT TO TITLE 36 OF ARTICLE 71 OF THE NEW YORK ENVIRONMENTAL CONSERVATION LAW.

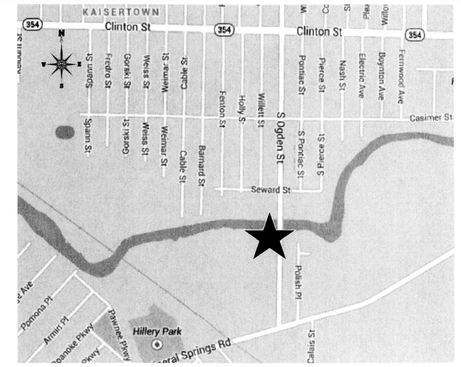
ENVIRONMENTAL EASEMENT AREA ACCESS

THE DEC OR THEIR AGENT MAY ACCESS THE ENVIRONMENTAL EASEMENT AREA AS SHOWN HEREON THROUGH ANY EXISTING STREET ACCESS OR BUILDING INGRESS/EGRESS ACCESS POINT

GENERAL NOTES:

1. HORIZONTAL DATUM: NORTH AMERICAN DATUM OF 1983 (NAD83), NEW YORK STATE WESTERN ZONE COORDINATE SYSTEM, US SURVEY FEET, ESTABLISHED WITH GPS USING THE NYSDOT NETWORK (NYSNET RTN) REAL TIME NETWORK.
2. LOT LINES ARE SHOWN IN ITS APPROXIMATE LOCATION FROM MAPS FILED IN THE ERIE COUNTY CLERK' OFFICE.
3. BEING THE LAND IN THE INDENTURE DEED DATED AND RECORDED 10/11/2012 IN LIBER 11231 OF DEEDS AT PAGE 1365 IN THE ERIE COUNTY CLERK'S OFFICE.
4. THIS PROPERTY IS PARTIALLY LOCATED WITHIN THE AREA HAVING A ZONE DESIGNATED "AE" BY FEDERAL BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA) OF FLOOD INSURANCE RATE MAP NO. 36029C0331C, WITH AN EFFECTIVE DATE SEPTEMBER 26, 2008, COMMUNITY NO. 360230, IN THE CITY OF BUFFALO, ERIE COUNTY AND THE STATE OF NEW YORK.
5. THIS SURVEY HAS BEEN REVISED WITH THE BENEFIT OF THE TITLE REPORT NO. 1213-41632, AS PREPARED BY CHICAGO TITLE INSURANCE COMPANY, DATE OCTOBER 11, 2012.





PROJECT LOCATION SKETCH
NOT TO SCALE

PARCEL DESCRIPTION FOR 154 SOUTH OGDEN STREET SITE TITLE No.1213-41632

ALL THAT TRACT OR PARCEL OF LAND SITUATED IN THE CITY OF BUFFALO, COUNTY OF ERIE AND THE STATE OF NEW YORK, BEING PART OF LOTS 6, 7, AND 129½, TOWNSHIP 10 RANGE 7 OF THE BUFFALO CREEK RESERVATION AND PART OF THE BED OF BUFFALO CREEK, BOUNDED AND DESCRIBED AS FOLLOWS:

BEGINNING AT A POINT IN THE NORTHWESTERLY LINE OF SOUTH OGDEN STREET, A DISTANCE OF 432.34 FEET NORTH OF ITS INTERSECTION WITH THE NORTHERLY LINE OF MINERAL SPRINGS ROAD; THENCE ALONG THE NORTHERLY WATER LINE OF OLD BUFFALO RIVER AS SHOWN UNDER MAP COVER NO. 422, WHICH LINE IS ALSO THE NORTHERLY LINE OF LANDS CONVEYED TO THE WESTERN NEW YORK & PENNSYLVANIA RAILROAD COMPANY BY DEED RECORDED IN THE ERIE COUNTY CLERKS OFFICE IN LIBER 1346 OF DEEDS AT PAGE 372, THE FOLLOWING COURSES: NORTH 88°-54'-02" WEST A DISTANCE OF 203.20 FEET TO A POINT; THENCE NORTH 50°-14'-02" WEST, 63.96 FEET TO A POINT; THENCE SOUTH 78°-47'-58" WEST, 103.95 FEET TO A POINT; THENCE NORTH 88°-59'-02" WEST, 101.60 FEET TO A POINT; THENCE NORTH 86°-41'-02" WEST 50.04 FEET TO A POINT; THENCE NORTH 78°-16'-02" WEST, 102.70 FEET TO A POINT; THENCE NORTH 89°-22'-02" WEST 101.71 FEET TO A POINT; THENCE NORTH 55°-40'-45" WEST, 58.32 FEET TO A POINT; THENCE RUNNING ALONG THE NORTHERLY AND WESTERLY LINES OF THE WESTERN NEW YORK & PENNSYLVANIA RAILROAD COMPANY'S LANDS BY DEED AFORESAID, SOUTH 51°-09'-34" WEST, 200.81 FEET TO A POINT; THENCE SOUTH 6°-43'-57" EAST, 140.00 FEET TO THE NORTHEASTERLY LINE OF LANDS OF BUFFALO NIAGARA ELECTRIC COMPANY BE DEED RECORDED IN THE ERIE COUNTY CLERKS OFFICE IN LIBER 2768 OF DEEDS AT PAGE 490; THENCE NORTH 53°-56'-55" WEST ALONG LANDS SO CONVEYED TO BUFFALO NIAGARA ELECTRIC COMPANY BY DEED AFDRESAD A MEASURED DISTANCE OF 1199.24 FEET TO THE SOUTHERLY LINE OF LANDS CONVEYED TO THE CITY OF BUFFALO BY DEED RECORDED IN LIBER 815 OF DEEDS AT PAGE 637; THENCE NORTH 63°-29' EAST ALONG THE SOUTHERLY LINES OF LANDS SO CONVEYED TO THE CITY OF BUFFALO, 291.91 FEET TO THE SOUTH LINE OF THE BUFFALO RIVER; THENCE NORTH 79°-45'-58" EAST ALONG THE SOUTHERLY LINE OF THE BUFFALO RIVER, 913.88 FEET TO A POINT; THENCE SOUTH 88°-54'-02" EAST AND CONTINUING ALONG THE SOUTHERLY LINE OF THE BUFFALO RIVER, 709.50 FEET TO THE NORTHWESTERLY LINE OF SOUTH OGDEN STREET; THENCE SOUTH 00°-38'-31" WEST, 804.22 FEET ALONG THE SAID NORTHWESTERLY LINE OF SOUTH OGDEN STREET TO THE POINT OF BEGINNING. CONTAINING 27.42 ACRES OF LAND, MORE OR LESS.

ENVIRONMENTAL EASEMENT DESCRIPTION FOR 154 SOUTH OGDEN STREET SITE TITLE NO. 1213-41632 FOR BCP SITE NO. C915268 AND FINAL COVER SYSTEM

ALL THAT TRACT OR PARCEL OF LAND SITUATED IN THE CITY OF BUFFALO, COUNTY OF ERIE AND THE STATE OF NEW YORK, BEING PART OF LOTS 6, 7, AND 129½, TOWNSHIP 10 RANGE 7 OF THE BUFFALO CREEK RESERVATION AND PART OF THE BED OF BUFFALO CREEK, BOUNDED AND DESCRIBED AS FOLLOWS:

BEGINNING AT A POINT IN THE NORTHWESTERLY LINE OF SOUTH OGDEN STREET, A DISTANCE OF 432.34 FEET NORTH OF ITS INTERSECTION WITH THE NORTHERLY LINE OF MINERAL SPRINGS ROAD; THENCE ALONG THE NORTHERLY WATER LINE OF OLD BUFFALO RIVER AS SHOWN UNDER MAP COVER NO. 422, WHICH LINE IS ALSO THE NORTHERLY LINE OF LANDS CONVEYED TO THE WESTERN NEW YORK & PENNSYLVANIA RAILROAD COMPANY BY DEED RECORDED IN THE ERIE COUNTY CLERKS OFFICE IN LIBER 1346 OF DEEDS AT PAGE 372, THE FOLLOWING COURSES: NORTH 88°-40'-35" WEST A DISTANCE OF 203.20 FEET TO A POINT; THENCE NORTH 50°-00'-35" WEST, 63.96 FEET TO A POINT; THENCE SOUTH 79°-01'-25" WEST, 103.95 FEET TO A POINT; THENCE NORTH 88°-45'-35" WEST, 101.60 FEET TO A POINT; THENCE NORTH 86°-27'-35" WEST 50.04 FEET TO A POINT; THENCE NORTH 78°-02'-35" WEST, 102.70 FEET TO A POINT; THENCE NORTH 89°-08'-35" WEST 101.71 FEET TO A POINT; THENCE NORTH 55°-27'-18" WEST, 58.32 FEET TO A POINT; THENCE RUNNING ALONG THE NORTHERLY AND WESTERLY LINES OF THE WESTERN NEW YORK & PENNSYLVANIA RAILROAD COMPANY LANDS BY DEED AFORESAID, SOUTH 51°-23'-21" WEST, 200.81 FEET TO A POINT; THENCE SOUTH 8°-30'-30" EAST, 140.00 FEET. THENCE NORTH 53°-43'-28" WEST ALONG SAID LANDS CONVEYED TO BUFFALO NIAGARA ELECTRIC COMPANY, A DISTANCE OF 465.68 FEET TO A POINT; THENCE NORTH 00°-02'-00" WEST ALONG A STRAIGHT LINE, A DISTANCE OF 554.71 FEET TO A POINT; THENCE NORTH 79°-58'-59" EAST ALONG A STRAIGHT LINE, A DISTANCE OF 584.47 FEET TO A POINT; THENCE SOUTH 88°-41'-02" EAST ALONG A STRAIGHT LINE, A DISTANCE OF 703.57 FEET TO THE NORTHWESTERLY LINE OF SOUTH OGDEN STREET; THENCE SOUTH 00°-51'-31" WEST ALONG THE NORTHWESTERLY LINE OF SOUTH OGDEN STREET, A DISTANCE OF 739.22 FEET TO THE POINT OF BEGINNING. CONTAINING 20.95 ACRES OF LAND, MORE OR LESS.

ENGINEERING / INSTITUTIONAL CONTROLS

- COVER SYSTEM, THE COVER SYSTEM IS A PERMANENT CONTROL. PROCEDURES FOR THE INSPECTION AND MAINTENANCE OF THIS COVER ARE PROVIDED IN THE MONITORING PLAN IN SECTION 4 OF THE SITE MANAGEMENT PLAN (SMP).
- COMPLIANCE WITH THE ENVIRONMENTAL EASEMENT AND THE SMP BY THE GRANTOR AND THE GRANTOR'S SUCCESSORS AND ASSIGNS;
- ALL ENGINEERING CONTROLS MUST BE OPERATED AND MAINTAINED AS SPECIFIED IN THE SMP;
- ALL ENGINEERING CONTROLS ON THE CONTROLLED PROPERTY MUST BE INSPECTED AT A FREQUENCY AND IN A MANNER DEFINED IN THE SMP;
- GROUNDWATER, SOIL VAPOR AND OTHER ENVIRONMENTAL OR PUBLIC HEALTH MONITORING MUST BE PERFORMED AS DEFINED IN THE SMP;
- 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 USE AND DEVELOPMENT OF THE SITE IS LIMITED TO COMMERCIAL AND INDUSTRIAL USES ONLY AS DESCRIBED IN 6NYCRR PART 375-1.8(G) (2) (III) & (IV).
- THE PROPERTY MAY NOT BE USED FOR A HIGHER LEVEL OF USE, SUCH AS RESTRICTED RESIDENTIAL USE WITHOUT ADDITIONAL REMEDIATION AND AMENDMENT OF THE ENVIRONMENTAL EASEMENT AS APPROVED BY THE NYSDEC;
- ALL FUTURE ACTIVITIES ON THE PROPERTY THAT WILL DISTURB REMAINING CONTAMINATED MATERIAL MUST BE CONDUCTED IN ACCORDANCE WITH THE SMP;
- THE USE OF THE GROUNDWATER UNDERLYING THE PROPERTY IS PROHIBITED WITHOUT TREATMENT RENDERING IT SAFE FOR INTENDED USE;
- 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.

SCHEDULE B, SECTION 2: CHICAGO TITLE INSURANCE COMPANY COMMITMENT FOR TITLE INSURANCE #1213-41632:

EXCEPTION NUMBER:

8. EASMENT GRANTED TO IROQUOIS GAS CORPORATION BY INSTRUMENT RECORDED IN LIBER 6921 OF DEEDS AT PAGE 603 ON AUGUST 23, 1963. (SHOWN HEREON)
9. CONDITIONS CONTAINED IN DEEDS RECORDED IN THE ERIE COUNTY CLERKS OFFICE IN LIBER 7065 OF DEEDS AT PAGE 601 AND LIBER 7441 OF DEEDS AT PAGE 341 ON DECEMBER 3, 1964 AND FEBRUARY 6, 1968. (UNABLE TO PLOT)

THE ENGINEERING AND INSTITUTIONAL CONTROLS FOR THIS EASEMENT ARE SET FORTH IN THE SITE MANAGEMENT PLAN (SMP). A COPY OF THE SMP MUST BE OBTAINED BY ANY PARTY WITH AN INTEREST IN THE PROPERTY. THE SMP CAN BE OBTAINED FROM THE NYS DEPARTMENT OF ENVIRONMENTAL CONSERVATION, DIVISION OF ENVIRONMENTAL REMEDIATION, SITE CONTROL SECTION, 625 BROADWAY, ALBANY, NY 12233 OR AT DERWEB@GW.DEC.STATE.NY.US.

Legend:

AC. = ACRES
APPROX. = APPROXIMATE
AVE. = AVENUE
BIT. = BITUMINOUS
CB = CATCH BASIN
CH. = CHAIN
CONC. = CONCRETE
COR. = CORNER
C.T.V. = CABLE TV BOX
℄ = CENTERLINE
D. = DEED
DIA. = DIAMETER
DIST. = DISTANCE
= DRAINAGE STRUCTURE JUNCTION BOX
EASMT. = EASEMENT
EX. = EXISTING
FNC. = FENCE
GLM = GAS LINE MARKER
= DRAINAGE STRUCTURE SQUARE
= HYDRANT
E = EAST
ELEV. = ELEVATION
E/B = ELECTRICAL
IP. = IRON PIPE
I. = LIBER
LS = LIFT STATION
MH = MANHOLE
MP. = MAP
P = PAGE
MS. = MEASURED
MW = MONITORING WELL
N = NORTH
NO. = NUMBER
O/H = OVERHEAD
O/L = ON LINE
℄ = PROPERTY LINE
= POWER POLE
R = RADIUS
RD. = ROAD
S = SOUTH
ST. = STREET
STA. = STATION
SMH = SANITARY MANHOLE
T.M.# = TAX MAP NO.
T/B = TELEPHONE JUNCTION BOX
TYP. = TYPICAL
W = WEST
W/ = WITH
WD. = WOOD
W.F. = WOOD/FRAME
OVERHEAD WIRES
BCP SITE AREA
EDGE OF ROADWAY
PROPERTY LINES
SUB-PARCELS
FENCE (TYPE NOTED)
SANITARY SEWER LINE

WENDEL JOB NO.: 469601

NOTES:
-ONLY COPIES FROM THE ORIGINAL OF THIS SURVEY MAP MARKED WITH THE SIGNATURE AND AN ORIGINAL OF THE LAND SURVEYOR'S SEAL SHALL BE CONSIDERED TO BE VALID TRUE COPIES.

-UNAUTHORIZED ALTERATION OR ADDITION TO ANY SURVEY DRAWING, DESIGN, SPECIFICATION, PLAN OR REPORT IS A VIOLATION OF SECTION 7209, PROVISION 2 OF THE NEW YORK STATE EDUCATION LAW.

STATE OF NEW YORK
MARSHALL D. WILSON
No. 050192
LICENSED LAND SURVEYOR

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

PREPARED BY THE CONSULTANT

wendel
140 John James Audubon Pkwy, Suite 201
Buffalo, NY 14228
www.wendelcompanies.com
p:716.688.0766 f:716.625.6825
Wendel WD Architecture, Engineering, Surveying and Landscape Architecture P.C.

MAP OF
154 SOUTH OGDEN STREET
BUFFALO, NEW YORK
SITE NAME: 154 SOUTH OGDEN STREET
TO
THE NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
SITUATE IN PARTS OF
LOTS 6, 7 AND 129 ½, TOWNSHIP 10, RANGE 7
OF THE BUFFALO CREEK RESERVATION
AND PART OF THE BED OF THE BUFFALO CREEK
CITY OF BUFFALO, COUNTY OF ERIE
STATE OF NEW YORK
T.M.# PART OF 123.15-1-4

100' 50' 25' 0' 100' 200'
30.48 15.24 0 30.48 60.96
METERS

1 INCH = 100 FEET
1:1200

I HEREBY CERTIFY TO (1) THE PEOPLE OF THE STATE OF NEW YORK ACTING THROUGH THEIR COMMISSIONER OF THE DEPARTMENT OF ENVIRONMENTAL CONSERVATION, (2) CHICAGO TITLE INSURANCE COMPANY, THAT THIS IS AN ACCURATE SURVEY MAP UNDER MY DIRECTION, OF AN ACTUAL SURVEY, AND THAT THE SURVEY WAS PERFORMED IN ACCORDANCE TO THE STANDARDS AND PROCEDURES ADOPTED BY THE NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION, FEBRUARY 2014. FIELD SURVEY COMPLETED MARCH 19, 2014

MARSHALL D. WILSON, LAND SURVEYOR #050192 — DATE 7/02/14

BRIAN S. SMITH, CST 3, SURVEY DRAFTER — DATE 7/02/14

SHEET 1 of 1

BCP SITE NUMBERS: C915268

APPENDIX B

ENVIRONMENTAL EASEMENT

CHRISTOPHER L. JACOBS, ERIE COUNTY CLERK
REF:

DATE:9/15/2014
TIME:9:19:21 AM
RECEIPT: 14145120

PARALEGAL SERVICES OF BUFFALO
ACCOUNT #: 9273

ITEM - 01 785
RECD: 9/15/2014 9:30:14 AM
FILE: 2014184462 BK/PG D 11269/1491
Deed Sequence: TT20143129
154 SOUTH OGDEN LLC

Recording Fees	90.00
TP584	10.00

Subtotal 100.00

TOTAL DUE	$100.00
PAID TOTAL	$100.00
PAID ESCROW	$100.00

REC BY: Nancy
COUNTY RECORDER

ENVIRONMENTAL EASEMENT GRANTED PURSUANT TO ARTICLE 71, TITLE 36 OF THE NEW YORK STATE ENVIRONMENTAL CONSERVATION LAW

THIS INDENTURE made this 4th day of September, 2014, between Owner 154 South Ogden, LLC, having an office at 2219 South Park Avenue, Buffalo, NY 14220, County of Erie, State of New York (the "**Grantor**"), and The People of the State of New York (the "**Grantee**"), acting through their Commissioner of the Department of Environmental Conservation (the "**Commissioner**", or "**NYSDEC**" or "**Department**" as the context requires) with its headquarters located at 625 Broadway, Albany, New York 12233,

WHEREAS, the Legislature of the State of New York has declared that it is in the public interest to encourage the remediation of abandoned and likely contaminated properties ("**sites**") that threaten the health and vitality of the communities they burden while at the same time ensuring the protection of public health and the environment; and

WHEREAS, the Legislature of the State of New York has declared that it is in the public interest to establish within the Department a statutory environmental remediation program that includes the use of Environmental Easements as an enforceable means of ensuring the performance of operation, maintenance, and/or monitoring requirements and the restriction of future uses of the land, when an environmental remediation project leaves residual contamination at levels that have been determined to be safe for a specific use, but not all uses, or which includes engineered structures that must be maintained or protected against damage to perform properly and be effective, or which requires groundwater use or soil management restrictions; and

FILED
SEP 10 2014
ERIE COUNTY
CLERK'S OFFICE

WHEREAS, the Legislature of the State of New York has declared that Environmental Easement shall mean an interest in real property, created under and subject to the provisions of Article 71, Title 36 of the New York State Environmental Conservation Law ("**ECL**") which contains a use restriction and/or a prohibition on the use of land in a manner inconsistent with engineering controls which are intended to ensure the long term effectiveness of a site remedial program or eliminate potential exposure pathways to hazardous waste or petroleum; and

WHEREAS, Grantor, is the owner of real property located at the address of 154 South Ogden Street in the City of Buffalo, County of Erie and State of New York, known and designated on the tax map of the County Clerk of Erie as tax map parcel numbers: Section 123.15 Block 1 Lot 4, being the same as that property conveyed to Grantor by deed dated October 11, 2012 and recorded in the Erie County Clerk's Office in Liber and Page Liber 11231 Page 1365. The property subject to this Environmental Easement (the "**Controlled Property**") comprises approximately 21 +/- acres, and is hereinafter more fully described in the Land Title Survey dated July 2, 2014 prepared Marshall D. Wilson at Wendel WD Architecture, Engineering, Surveying and Landscape Architecture P.C., which will be attached to the Site Management Plan. The Controlled Property description is set forth in and attached hereto as Schedule A; and

WHEREAS, the Department accepts this Environmental Easement in order to ensure the protection of public health and the environment and to achieve the requirements for remediation established for the Controlled Property until such time as this Environmental Easement is

extinguished pursuant to ECL Article 71, Title 36; and

NOW THEREFORE, in consideration of the mutual covenants contained herein and the terms and conditions of Brownfield Cleanup Agreement Index Number: C915268-10-12, Grantor conveys to Grantee a permanent Environmental Easement pursuant to ECL Article 71, Title 36 in, on, over, under, and upon the Controlled Property as more fully described herein ("**Environmental Easement**")

1. Purposes. Grantor and Grantee acknowledge that the Purposes of this Environmental Easement are: to convey to Grantee real property rights and interests that will run with the land in perpetuity in order to provide an effective and enforceable means of encouraging the reuse and redevelopment of this Controlled Property at a level that has been determined to be safe for a specific use while ensuring the performance of operation, maintenance, and/or monitoring requirements; and to ensure the restriction of future uses of the land that are inconsistent with the above-stated purpose.

2. Institutional and Engineering Controls. The controls and requirements listed in the Department approved Site Management Plan ("**SMP**") including any and all Department approved amendments to the SMP are incorporated into and made part of this Environmental Easement. These controls and requirements apply to the use of the Controlled Property, run with the land, are binding on the Grantor and the Grantor's successors and assigns, and are enforceable in law or equity against any owner of the Controlled Property, any lessees and any person using the Controlled Property.

A. (1) The Controlled Property may be used for: Restricted Residential as described in 6 NYCRR Part 375-1.8(g)(2)(ii), Commercial as described in 6 NYCRR Part 375-1.8(g)(2)(iii) and Industrial as described in 6 NYCRR Part 375-1.8(g)(2)(iv)

(2) All Engineering Controls, if applicable, must be operated and maintained as specified in the Site Management Plan (SMP);

(3) All Engineering Controls, if applicable, must be inspected at a frequency and in a manner defined in the SMP;

(4) The use of groundwater underlying the property is prohibited without necessary water quality treatment as determined by the NYSDOH or the Erie County Department of Health to render it safe for use as drinking water or for industrial purposes, and the user must first notify and obtain written approval to do so from the Department;

(5) Groundwater and other environmental or public health monitoring must be performed as defined in the SMP;

(6) 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;

(7) All future activities on the property that will disturb remaining

contaminated material must be conducted in accordance with the SMP;

(8) Monitoring to assess the performance and effectiveness of the remedy must be performed as defined in the SMP;

(9) Operation, maintenance, monitoring, inspection, and reporting of any mechanical or physical components of the remedy shall be performed as defined in the SMP;

(10) Access to the site must be provided to agents, employees or other representatives of the State of New York with reasonable prior notice to the property owner to assure compliance with the restrictions identified by this Environmental Easement.

B. The Controlled Property shall not be used for Residential purposes as defined in 6NYCRR 375-1.8(g)(2)(i), and the above-stated engineering controls may not be discontinued without an amendment or extinguishment of this Environmental Easement.

C. The SMP describes obligations that the Grantor assumes on behalf of Grantor, its successors and assigns. The Grantor's assumption of the obligations contained in the SMP which may include sampling, monitoring, and/or operating a treatment system, and providing certified reports to the NYSDEC, is and remains a fundamental element of the Department's determination that the Controlled Property is safe for a specific use, but not all uses. The SMP may be modified in accordance with the Department's statutory and regulatory authority. The Grantor and all successors and assigns, assume the burden of complying with the SMP and obtaining an up-to-date version of the SMP from:

Site Control Section
Division of Environmental Remediation
NYSDEC
625 Broadway
Albany, New York 12233
Phone: (518) 402-9553

D. Grantor must provide all persons who acquire any interest in the Controlled Property a true and complete copy of the SMP that the Department approves for the Controlled Property and all Department-approved amendments to that SMP.

E. Grantor covenants and agrees that until such time as the Environmental Easement is extinguished in accordance with the requirements of ECL Article 71, Title 36 of the ECL, the property deed and all subsequent instruments of conveyance relating to the Controlled Property shall state in at least fifteen-point bold-faced type:

This property is subject to an Environmental Easement held by the New York State Department of Environmental Conservation pursuant to Title 36 of Article 71 of the Environmental Conservation Law.

F. Grantor covenants and agrees that this Environmental Easement shall be incorporated in full or by reference in any leases, licenses, or other instruments granting a right to use the Controlled Property.

G. Grantor covenants and agrees that it shall, at such time as NYSDEC may require, submit to NYSDEC a written statement by an expert the NYSDEC may find acceptable certifying under penalty of perjury, in such form and manner as the Department may require, that:

(1) The inspection of the site to confirm the effectiveness of the institutional and engineering controls required by the remedial program was performed under the direction of the individual set forth at 6 NYCRR Part 375-1.8(h)(3);
(2) The owner will continue to allow access to such real property to evaluate the continued maintenance of such controls;
(3) Nothing has occurred that would constitute a violation or failure to comply with any site management plan for such controls;
(4) The report and all attachments were prepared under the direction of, and reviewed by, the party making the certification;
(5) To the best of his/her 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
(6) The information presented is accurate and complete.

3. Right to Enter and Inspect. Grantee, its agents, employees, or other representatives of the State may enter and inspect the Controlled Property in a reasonable manner and at reasonable times to assure compliance with the above-stated restrictions.

4. Reserved Grantor's Rights. Grantor reserves for itself, its assigns, representatives, and successors in interest with respect to the Property, all rights as fee owner of the Property, including:

A. Use of the Controlled Property for all purposes not inconsistent with, or limited by the terms of this Environmental Easement;

B. The right to give, sell, assign, or otherwise transfer part or all of the underlying fee interest to the Controlled Property, subject and subordinate to this Environmental Easement;

5. Enforcement

A. This Environmental Easement is enforceable in law or equity in perpetuity by Grantor, Grantee, or any affected local government, as defined in ECL Section 71-3603, against the owner of the Property, any lessees, and any person using the land. Enforcement shall not be defeated because of any subsequent adverse possession, laches, estoppel, or waiver. It is not a defense in any action to enforce this Environmental Easement that: it is not appurtenant to an interest in real property; it is not of a character that has been recognized traditionally at common law; it imposes a negative burden; it imposes affirmative obligations upon the owner of any interest in the burdened property; the benefit does not touch or concern real property; there is no privity of estate or of contract; or it imposes an unreasonable restraint on alienation.

B. If any person violates this Environmental Easement, the Grantee may revoke the Certificate of Completion with respect to the Controlled Property.

C. Grantee shall notify Grantor of a breach or suspected breach of any of the terms of this Environmental Easement. Such notice shall set forth how Grantor can cure such breach or suspected breach and give Grantor a reasonable amount of time from the date of receipt of notice in which to cure. At the expiration of such period of time to cure, or any extensions granted by Grantee, the Grantee shall notify Grantor of any failure to adequately cure the breach or suspected breach, and Grantee may take any other appropriate action reasonably necessary to remedy any breach of this Environmental Easement, including the commencement of any proceedings in accordance with applicable law.

D. The failure of Grantee to enforce any of the terms contained herein shall not be deemed a waiver of any such term nor bar any enforcement rights.

6. Notice. Whenever notice to the Grantee (other than the annual certification) or approval from the Grantee is required, the Party providing such notice or seeking such approval shall identify the Controlled Property by referencing the following information:

County, NYSDEC Site Number, NYSDEC Brownfield Cleanup Agreement, State Assistance Contract or Order Number, and the County tax map number or the Liber and Page or computerized system identification number.

Parties shall address correspondence to:

Site Number: C915271
Office of General Counsel
NYSDEC
625 Broadway
Albany New York 12233-5500

With a copy to:

Site Control Section
Division of Environmental Remediation
NYSDEC
625 Broadway
Albany, NY 12233

All notices and correspondence shall be delivered by hand, by registered mail or by Certified mail and return receipt requested. The Parties may provide for other means of receiving and communicating notices and responses to requests for approval.

7. Recordation. Grantor shall record this instrument, within thirty (30) days of execution of this instrument by the Commissioner or her/his authorized representative in the office of the recording officer for the county or counties where the Property is situated in the manner prescribed by Article 9 of the Real Property Law.

8. Amendment. Any amendment to this Environmental Easement may only be executed by the Commissioner of the New York State Department of Environmental Conservation or the Commissioner's Designee, and filed with the office of the recording officer for the county or counties where the Property is situated in the manner prescribed by Article 9 of the Real Property

Law.

9. Extinguishment. This Environmental Easement may be extinguished only by a release by the Commissioner of the New York State Department of Environmental Conservation, or the Commissioner's Designee, and filed with the office of the recording officer for the county or counties where the Property is situated in the manner prescribed by Article 9 of the Real Property Law.

10. Joint Obligation. If there are two or more parties identified as Grantor herein, the obligations imposed by this instrument upon them shall be joint and several.

IN WITNESS WHEREOF, Grantor has caused this instrument to be signed in its name.

154 South Ogden, LLC:

By: _____ Date: 6-19-14
James Neimeier, Authorized Person

Grantor's Acknowledgment

STATE OF NEW YORK)
) ss:
COUNTY OF ERIE)

On the 9 day of June, in the year 2014, before me, the undersigned, personally appeared James Neimeier, personally known to me or proved to me on the basis of satisfactory evidence to be the individual whose name is subscribed to the within instrument and acknowledged to me that he executed the same in his capacity, and that by his signature on the instrument, the individual, or the person upon behalf of which the individual acted, executed the instrument.

_____
Notary Public - State of New York

AUDREY J. MILLER
Notary Public, State of New York
Qualified in Erie County
My Commission Expires: 3/30/2018

THIS ENVIRONMENTAL EASEMENT IS HEREBY ACCEPTED BY THE PEOPLE OF THE STATE OF NEW YORK, Acting By and Through the Department of Environmental Conservation as Designee of the Commissioner,

By: _____
Robert W. Schick, Director
Division of Environmental Remediation

Grantee's Acknowledgment

STATE OF NEW YORK)
) ss:
COUNTY OF ALBANY)

On the 4th day of September, in the year 2014, before me, the undersigned, personally appeared Robert W. Schick, personally known to me or proved to me on the basis of satisfactory evidence to be the individual whose name is subscribed to the within instrument and acknowledged to me that he executed the same in his capacity as Designee of the Commissioner of the State of New York Department of Environmental Conservation, and that by his signature on the instrument, the individual, or the person upon behalf of which the individual acted, executed the instrument.

_____
Notary Public - State of New York

David J. Chiusano
Notary Public, State of New York
No. 01CH5032146
Qualified in Schenectady County
Commission Expires August 22, 2018

SCHEDULE "A" PROPERTY DESCRIPTION

Enter Property Description

Environmental Easement Description
For 154 South Ogden Street Site
Title No. 1213-41632
For BCP Site No, C915268 and Final Cover System

ALL THAT TRACT OR PARCEL OF LAND situated in the City of Buffalo, County of Erie and the State of New York, being part of lots 6, 7, and 129 1/2, Township 10 Range 7 of the Buffalo Creek Reservation and part of the bed of Buffalo Creek, bounded and described as follow:

BEGINNING at a point in the northwesterly line of South Ogden Street, a distance of 432.34 feet north of its intersection with the northerly line of Mineral Springs Road; thence along the northerly water line of old Buffalo River as shown under map cover no. 422, which line is also the northerly line of lands conveyed to the Western New York and Pennsylvania Railroad Company by Deed recorded in the Erie County Clerk's Office in Liber 1346 of Deeds at Page 372, the following courses: North 88° 40' 35" West a distance of 203.20 feet to a point; thence North 50° 00' 35" West, 63.96 feet to a point; thence South 79° 01' 25" West, 103.95 feet to a point; thence North 88° 45' 35" West 101.60 feet to a point; thence North 86° 27' 35" West 50.04 feet to a point; thence North 78° 02' 35" West, 102.70 feet to a point; thence North 89° 08' 35" West 101.71 feet to a point; thence North 55° 27' 18" West 58.32 feet to a point; thence running along the Northerly and Westerly lines of the Western New York and Pennsylvania Railroad Company lands by Deed aforesaid, South 51° 23' 21" West, 200.81 feet to a point; thence South 8° 30' 30" East, 140.00 feet; thence North 53° 43' 28" West along said lands conveyed to Buffalo Niagara Electric Company, a distance of 465.68 feet to a point; thence North 00° 02' 00" West along a straight line, a distance of 554.71 feet to a point; thence North 79° 58' 59" East along a straight line, a distance of 584.47 feet to a point; thence South 88° 41' 02" East along a straight line; a distance of 703.57 feet to the northwesterly line of South Ogden Street, a distance of 739.22 feet to the point of beginning containing 20.95 acres of land, more or less.

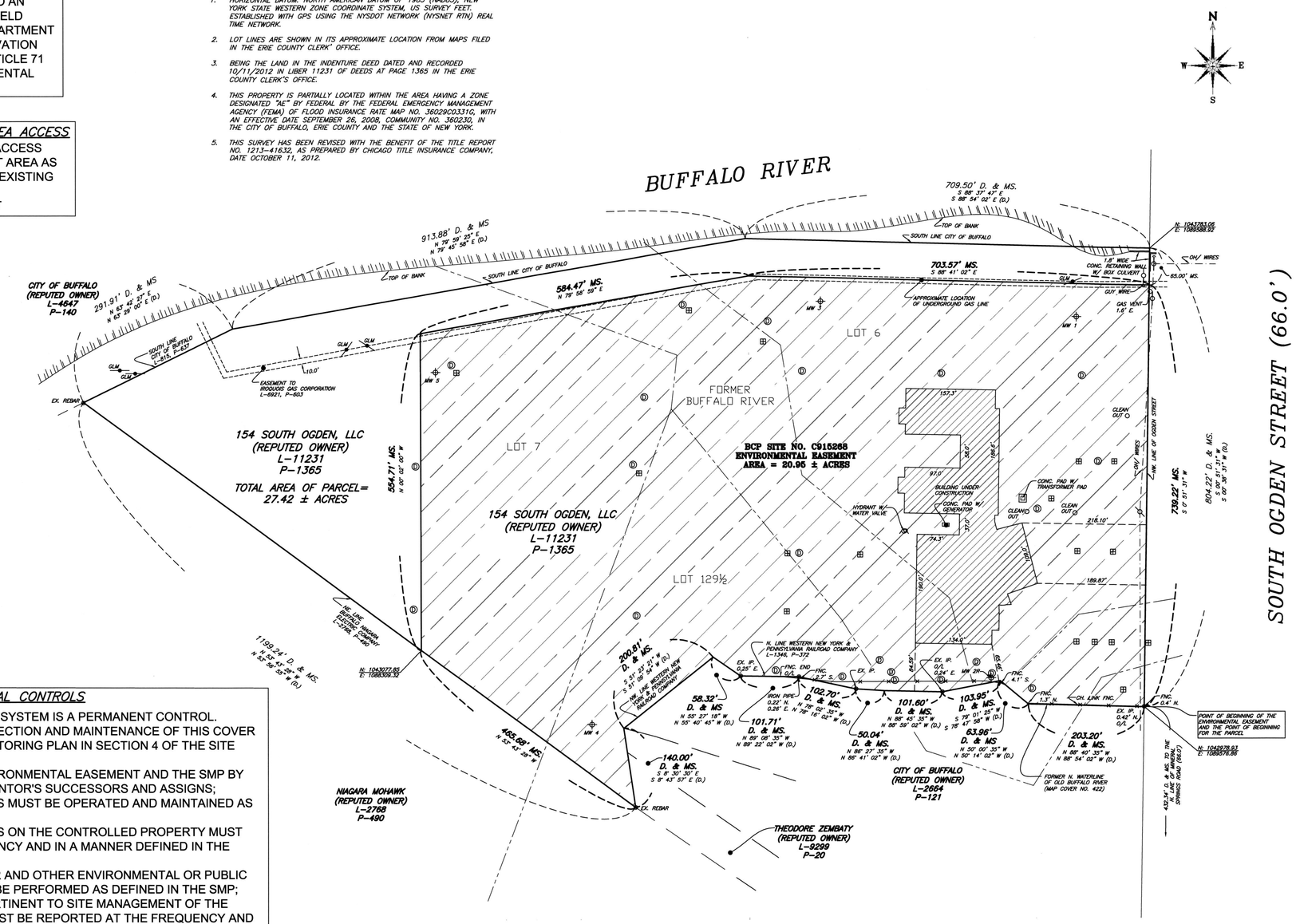
THIS PROPERTY IS SUBJECT TO AN ENVIRONMENTAL EASEMENT HELD BY THE NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION PURSUANT TO TITLE 36 OF ARTICLE 71 OF THE NEW YORK ENVIRONMENTAL CONSERVATION LAW.

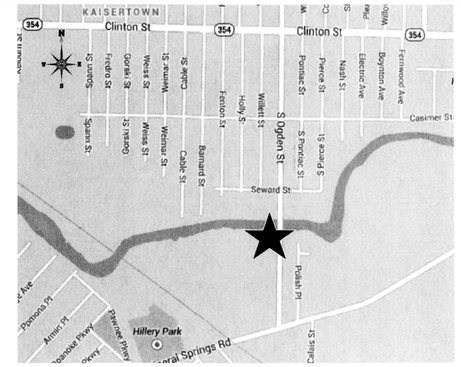
ENVIRONMENTAL EASEMENT AREA ACCESS

THE DEC OR THEIR AGENT MAY ACCESS THE ENVIRONMENTAL EASEMENT AREA AS SHOWN HEREON THROUGH ANY EXISTING STREET ACCESS OR BUILDING INGRESS/EGRESS ACCESS POINT

GENERAL NOTES:

1. HORIZONTAL DATUM: NORTH AMERICAN DATUM OF 1983 (NAD83), NEW YORK STATE WESTERN ZONE COORDINATE SYSTEM, US SURVEY FEET, ESTABLISHED WITH GPS USING THE NYSDOT NETWORK (NYSNET RTN) REAL TIME NETWORK.
2. LOT LINES ARE SHOWN IN ITS APPROXIMATE LOCATION FROM MAPS FILED IN THE ERIE COUNTY CLERK' OFFICE.
3. BEING THE LAND IN THE INDENTURE DEED DATED AND RECORDED 10/11/2012 IN LIBER 11231 OF DEEDS AT PAGE 1365 IN THE ERIE COUNTY CLERK'S OFFICE.
4. THIS PROPERTY IS PARTIALLY LOCATED WITHIN THE AREA HAVING A ZONE DESIGNATED "AE" BY FEDERAL BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA) OF FLOOD INSURANCE RATE MAP NO. 36029C0331C, WITH AN EFFECTIVE DATE SEPTEMBER 26, 2008, COMMUNITY NO. 360230, IN THE CITY OF BUFFALO, ERIE COUNTY AND THE STATE OF NEW YORK.
5. THIS SURVEY HAS BEEN REVISED WITH THE BENEFIT OF THE TITLE REPORT NO. 1213-41632, AS PREPARED BY CHICAGO TITLE INSURANCE COMPANY, DATE OCTOBER 11, 2012.





PROJECT LOCATION SKETCH
NOT TO SCALE

PARCEL DESCRIPTION FOR 154 SOUTH OGDEN STREET SITE TITLE No.1213-41632

ALL THAT TRACT OR PARCEL OF LAND SITUATED IN THE CITY OF BUFFALO, COUNTY OF ERIE AND THE STATE OF NEW YORK, BEING PART OF LOTS 6, 7, AND 129½, TOWNSHIP 10 RANGE 7 OF THE BUFFALO CREEK RESERVATION AND PART OF THE BED OF BUFFALO CREEK, BOUNDED AND DESCRIBED AS FOLLOWS:

BEGINNING AT A POINT IN THE NORTHWESTERLY LINE OF SOUTH OGDEN STREET, A DISTANCE OF 432.34 FEET NORTH OF ITS INTERSECTION WITH THE NORTHERLY LINE OF MINERAL SPRINGS ROAD; THENCE ALONG THE NORTHERLY WATER LINE OF OLD BUFFALO RIVER AS SHOWN UNDER MAP COVER NO. 422, WHICH LINE IS ALSO THE NORTHERLY LINE OF LANDS CONVEYED TO THE WESTERN NEW YORK & PENNSYLVANIA RAILROAD COMPANY BY DEED RECORDED IN THE ERIE COUNTY CLERKS OFFICE IN LIBER 1346 OF DEEDS AT PAGE 372, THE FOLLOWING COURSES: NORTH 88°-54'-02" WEST A DISTANCE OF 203.20 FEET TO A POINT; THENCE NORTH 50°-14'-02" WEST, 63.96 FEET TO A POINT; THENCE SOUTH 78°-47'-58" WEST, 103.95 FEET TO A POINT; THENCE NORTH 88°-59'-02" WEST, 101.60 FEET TO A POINT; THENCE NORTH 86°-41'-02" WEST 50.04 FEET TO A POINT; THENCE NORTH 78°-16'-02" WEST, 102.70 FEET TO A POINT; THENCE NORTH 89°-22'-02" WEST 101.71 FEET TO A POINT; THENCE NORTH 55°-40'-45" WEST, 58.32 FEET TO A POINT; THENCE RUNNING ALONG THE NORTHERLY AND WESTERLY LINES OF THE WESTERN NEW YORK & PENNSYLVANIA RAILROAD COMPANY'S LANDS BY DEED AFORESAID, SOUTH 51°-09'-34" WEST, 200.81 FEET TO A POINT; THENCE SOUTH 6°-43'-57" EAST, 140.00 FEET TO THE NORTHEASTERLY LINE OF LANDS OF BUFFALO NIAGARA ELECTRIC COMPANY BE DEED RECORDED IN THE ERIE COUNTY CLERKS OFFICE IN LIBER 2768 OF DEEDS AT PAGE 490; THENCE NORTH 53°-56'-55" WEST ALONG LANDS SO CONVEYED TO BUFFALO NIAGARA ELECTRIC COMPANY BY DEED AFDRESAD A MEASURED DISTANCE OF 1199.24 FEET TO THE SOUTHERLY LINE OF LANDS CONVEYED TO THE CITY OF BUFFALO BY DEED RECORDED IN LIBER 815 OF DEEDS AT PAGE 637; THENCE NORTH 63°-29' EAST ALONG THE SOUTHERLY LINES OF LANDS SO CONVEYED TO THE CITY OF BUFFALO, 291.91 FEET TO THE SOUTH LINE OF THE BUFFALO RIVER; THENCE NORTH 79°-45'-58" EAST ALONG THE SOUTHERLY LINE OF THE BUFFALO RIVER, 913.88 FEET TO A POINT; THENCE SOUTH 88°-54'-02" EAST AND CONTINUING ALONG THE SOUTHERLY LINE OF THE BUFFALO RIVER, 709.50 FEET TO THE NORTHWESTERLY LINE OF SOUTH OGDEN STREET; THENCE SOUTH 00°-38'-31" WEST, 804.22 FEET ALONG THE SAID NORTHWESTERLY LINE OF SOUTH OGDEN STREET TO THE POINT OF BEGINNING. CONTAINING 27.42 ACRES OF LAND, MORE OR LESS.

ENVIRONMENTAL EASEMENT DESCRIPTION FOR 154 SOUTH OGDEN STREET SITE TITLE NO. 1213-41632 FOR BCP SITE NO. C915268 AND FINAL COVER SYSTEM

ALL THAT TRACT OR PARCEL OF LAND SITUATED IN THE CITY OF BUFFALO, COUNTY OF ERIE AND THE STATE OF NEW YORK, BEING PART OF LOTS 6, 7, AND 129½, TOWNSHIP 10 RANGE 7 OF THE BUFFALO CREEK RESERVATION AND PART OF THE BED OF BUFFALO CREEK, BOUNDED AND DESCRIBED AS FOLLOWS:

BEGINNING AT A POINT IN THE NORTHWESTERLY LINE OF SOUTH OGDEN STREET, A DISTANCE OF 432.34 FEET NORTH OF ITS INTERSECTION WITH THE NORTHERLY LINE OF MINERAL SPRINGS ROAD; THENCE ALONG THE NORTHERLY WATER LINE OF OLD BUFFALO RIVER AS SHOWN UNDER MAP COVER NO. 422, WHICH LINE IS ALSO THE NORTHERLY LINE OF LANDS CONVEYED TO THE WESTERN NEW YORK & PENNSYLVANIA RAILROAD COMPANY BY DEED RECORDED IN THE ERIE COUNTY CLERKS OFFICE IN LIBER 1346 OF DEEDS AT PAGE 372, THE FOLLOWING COURSES: NORTH 88°-40'-35" WEST A DISTANCE OF 203.20 FEET TO A POINT; THENCE NORTH 50°-00'-35" WEST, 63.96 FEET TO A POINT; THENCE SOUTH 79°-01'-25" WEST, 103.95 FEET TO A POINT; THENCE NORTH 88°-45'-35" WEST, 101.60 FEET TO A POINT; THENCE NORTH 86°-27'-35" WEST 50.04 FEET TO A POINT; THENCE NORTH 78°-02'-35" WEST, 102.70 FEET TO A POINT; THENCE NORTH 89°-08'-35" WEST 101.71 FEET TO A POINT; THENCE NORTH 55°-27'-18" WEST, 58.32 FEET TO A POINT; THENCE RUNNING ALONG THE NORTHERLY AND WESTERLY LINES OF THE WESTERN NEW YORK & PENNSYLVANIA RAILROAD COMPANY LANDS BY DEED AFORESAID, SOUTH 51°-23'-21" WEST, 200.81 FEET TO A POINT; THENCE SOUTH 8°-30'-30" EAST, 140.00 FEET. THENCE NORTH 53°-43'-28" WEST ALONG SAID LANDS CONVEYED TO BUFFALO NIAGARA ELECTRIC COMPANY, A DISTANCE OF 465.68 FEET TO A POINT; THENCE NORTH 00°-02'-00" WEST ALONG A STRAIGHT LINE, A DISTANCE OF 554.71 FEET TO A POINT; THENCE NORTH 79°-58'-59" EAST ALONG A STRAIGHT LINE, A DISTANCE OF 584.47 FEET TO A POINT; THENCE SOUTH 88°-41'-02" EAST ALONG A STRAIGHT LINE, A DISTANCE OF 703.57 FEET TO THE NORTHWESTERLY LINE OF SOUTH OGDEN STREET; THENCE SOUTH 00°-51'-31" WEST ALONG THE NORTHWESTERLY LINE OF SOUTH OGDEN STREET, A DISTANCE OF 739.22 FEET TO THE POINT OF BEGINNING. CONTAINING 20.95 ACRES OF LAND, MORE OR LESS.

ENGINEERING / INSTITUTIONAL CONTROLS

- COVER SYSTEM, THE COVER SYSTEM IS A PERMANENT CONTROL. PROCEDURES FOR THE INSPECTION AND MAINTENANCE OF THIS COVER ARE PROVIDED IN THE MONITORING PLAN IN SECTION 4 OF THE SITE MANAGEMENT PLAN (SMP).
- COMPLIANCE WITH THE ENVIRONMENTAL EASEMENT AND THE SMP BY THE GRANTOR AND THE GRANTOR'S SUCCESSORS AND ASSIGNS;
- ALL ENGINEERING CONTROLS MUST BE OPERATED AND MAINTAINED AS SPECIFIED IN THE SMP;
- ALL ENGINEERING CONTROLS ON THE CONTROLLED PROPERTY MUST BE INSPECTED AT A FREQUENCY AND IN A MANNER DEFINED IN THE SMP;
- GROUNDWATER, SOIL VAPOR AND OTHER ENVIRONMENTAL OR PUBLIC HEALTH MONITORING MUST BE PERFORMED AS DEFINED IN THE SMP;
- 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 USE AND DEVELOPMENT OF THE SITE IS LIMITED TO COMMERCIAL AND INDUSTRIAL USES ONLY AS DESCRIBED IN 6NYCRR PART 375-1.8(G) (2) (III) & (IV).
- THE PROPERTY MAY NOT BE USED FOR A HIGHER LEVEL OF USE, SUCH AS RESTRICTED RESIDENTIAL USE WITHOUT ADDITIONAL REMEDIATION AND AMENDMENT OF THE ENVIRONMENTAL EASEMENT AS APPROVED BY THE NYSDEC;
- ALL FUTURE ACTIVITIES ON THE PROPERTY THAT WILL DISTURB REMAINING CONTAMINATED MATERIAL MUST BE CONDUCTED IN ACCORDANCE WITH THE SMP;
- THE USE OF THE GROUNDWATER UNDERLYING THE PROPERTY IS PROHIBITED WITHOUT TREATMENT RENDERING IT SAFE FOR INTENDED USE;
- 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.

SCHEDULE B, SECTION 2: CHICAGO TITLE INSURANCE COMPANY COMMITMENT FOR TITLE INSURANCE #1213-41632:

EXCEPTION NUMBER:

8. EASMENT GRANTED TO IROQUOIS GAS CORPORATION BY INSTRUMENT RECORDED IN LIBER 6921 OF DEEDS AT PAGE 603 ON AUGUST 23, 1963. (SHOWN HEREON)
9. CONDITIONS CONTAINED IN DEEDS RECORDED IN THE ERIE COUNTY CLERKS OFFICE IN LIBER 7065 OF DEEDS AT PAGE 601 AND LIBER 7441 OF DEEDS AT PAGE 341 ON DECEMBER 3, 1964 AND FEBRUARY 6, 1968. (UNABLE TO PLOT)

THE ENGINEERING AND INSTITUTIONAL CONTROLS FOR THIS EASEMENT ARE SET FORTH IN THE SITE MANAGEMENT PLAN (SMP). A COPY OF THE SMP MUST BE OBTAINED BY ANY PARTY WITH AN INTEREST IN THE PROPERTY. THE SMP CAN BE OBTAINED FROM THE NYS DEPARTMENT OF ENVIRONMENTAL CONSERVATION, DIVISION OF ENVIRONMENTAL REMEDIATION, SITE CONTROL SECTION, 625 BROADWAY, ALBANY, NY 12233 OR AT DERWEB@GW.DEC.STATE.NY.US.

Legend:

AC. = ACRES
APPROX. = APPROXIMATE
AVE. = AVENUE
BIT. = BITUMINOUS
CB = CATCH BASIN
CH. = CHAIN
CONC. = CONCRETE
COR. = CORNER
C.T.V. = CABLE TV BOX
℄ = CENTERLINE
D. = DEED
DIA. = DIAMETER
DIST. = DISTANCE
= DRAINAGE STRUCTURE JUNCTION BOX
EASMT. = EASEMENT
EX. = EXISTING
FNC. = FENCE
GLM = GAS LINE MARKER
= DRAINAGE STRUCTURE SQUARE
= HYDRANT
E = EAST
ELEV. = ELEVATION
E/B = ELECTRICAL
IP. = IRON PIPE
I. = LIBER
LS = LIFT STATION
MH = MANHOLE
MP. = MAP
P = PAGE
MS. = MEASURED
MW = MONITORING WELL
N = NORTH
NO. = NUMBER
O/H = OVERHEAD
O/L = ON LINE
℄ = PROPERTY LINE
= POWER POLE
R = RADIUS
RD. = ROAD
S = SOUTH
ST. = STREET
STA. = STATION
SMH = SANITARY MANHOLE
T.M.# = TAX MAP NO.
T/B = TELEPHONE JUNCTION BOX
TYP. = TYPICAL
W = WEST
W/ = WITH
WD. = WOOD
W.F. = WOOD/FRAME
OVERHEAD WIRES
BCP SITE AREA
EDGE OF ROADWAY
PROPERTY LINES
SUB-PARCELS
FENCE (TYPE NOTED)
SANITARY SEWER LINE

WENDEL JOB NO.: 469601

NOTES:
-ONLY COPIES FROM THE ORIGINAL OF THIS SURVEY MAP MARKED WITH THE SIGNATURE AND AN ORIGINAL OF THE LAND SURVEYOR'S SEAL SHALL BE CONSIDERED TO BE VALID TRUE COPIES.

-UNAUTHORIZED ALTERATION OR ADDITION TO ANY SURVEY DRAWING, DESIGN, SPECIFICATION, PLAN OR REPORT IS A VIOLATION OF SECTION 7209, PROVISION 2 OF THE NEW YORK STATE EDUCATION LAW.

STATE OF NEW YORK
MARSHALL D. WILSON
No. 050192
LICENSED LAND SURVEYOR

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

PREPARED BY THE CONSULTANT

wendel
140 John James Audubon Pkwy, Suite 201
Buffalo, NY 14228
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p:716.688.0766 f:716.625.6825
Wendel WD Architecture, Engineering, Surveying and Landscape Architecture P.C.

MAP OF
154 SOUTH OGDEN STREET
BUFFALO, NEW YORK
SITE NAME: 154 SOUTH OGDEN STREET
TO
THE NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
SITUATE IN PARTS OF
LOTS 6, 7 AND 129 ½, TOWNSHIP 10, RANGE 7
OF THE BUFFALO CREEK RESERVATION
AND PART OF THE BED OF THE BUFFALO CREEK
CITY OF BUFFALO, COUNTY OF ERIE
STATE OF NEW YORK
T.M.# PART OF 123.15-1-4

100' 50' 25' 0' 100' 200'
30.48 15.24 0 30.48 60.96
METERS

1 INCH = 100 FEET
1:1200

I HEREBY CERTIFY TO (1) THE PEOPLE OF THE STATE OF NEW YORK ACTING THROUGH THEIR COMMISSIONER OF THE DEPARTMENT OF ENVIRONMENTAL CONSERVATION, (2) CHICAGO TITLE INSURANCE COMPANY, THAT THIS IS AN ACCURATE SURVEY MAP UNDER MY DIRECTION, OF AN ACTUAL SURVEY, AND THAT THE SURVEY WAS PERFORMED IN ACCORDANCE TO THE STANDARDS AND PROCEDURES ADOPTED BY THE NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION, FEBRUARY 2014. FIELD SURVEY COMPLETED MARCH 19, 2014

MARSHALL D. WILSON, LAND SURVEYOR #050192 — DATE 7/02/14

BRIAN S. SMITH, CST 3, SURVEY DRAFTER — DATE 7/02/14

SHEET 1 of 1

BCP SITE NUMBERS: C915268

APPENDIX C

EXCAVATION WORK PLAN

BROWNFIELD CLEANUP PROGRAM
SITE MANAGEMENT PLAN

APPENDIX C
EXCAVATION PLAN

154 SOUTH OGDEN STREET SITE
BCP SITE NO. C915268
BUFFALO, NEW YORK

July 2014 0249-012-011

Prepared for:

154 South Ogden, LLC
2219 South Park Avenue
Buffalo, NY 14220

Prepared by:

Benchmark Environmental Engineering & Science, PLLC
2558 Hamburg Turnpike, Suite 300
Buffalo, NY 14218
(716)856-0599

SITE MANAGEMENT PLAN
APPENDIX C: EXCAVATION PLAN
154 South Ogden Street Site

Table of Contents

C-1: NOTIFICATION

At least 15 days prior to the start of any activity that is anticipated to encounter remaining contamination, the site owner or their representative will notify the Department. Currently, this notification will be made to:

Mr. Martin Doster, P.E.
Regional Hazardous Waste Remediation Engineer
NYSDEC – Region 9
270 Michigan Ave.
Buffalo, NY 14203-2999

This notification will include:

- A detailed description of the work to be performed, including the location and areal extent, plans for site re-grading, intrusive elements or utilities to be installed below the soil cover, estimated volumes of contaminated soil to be excavated and any work that may impact an engineering control,
- A summary of environmental conditions anticipated in the work areas, including the nature and concentration levels of contaminants of concern, potential presence of grossly contaminated media, and plans for any pre-construction sampling;
- A schedule for the work, detailing the start and completion of all intrusive work,
- A summary of the applicable components of this EWP,
- A statement that the work will be performed in compliance with this EWP and 29 CFR 1910.120,
- A copy of the contractor's health and safety plan, in electronic format, if it differs from the HASP provided in Appendix D of this document,
- Identification of disposal facilities for potential waste streams, and
- Identification of sources of any anticipated backfill, along with all required chemical testing results.

C-2: SOIL SCREENING METHODS

Visual, olfactory and instrument-based soil screening will be performed by a qualified environmental professional during all remedial and development excavations into known or potentially contaminated material (remaining contamination). Soil screening will be performed regardless of when the invasive work is done and will include all excavation and invasive work performed during development, such as excavations for foundations and utility work, after issuance of the COC.

Soils will be segregated based on previous environmental data and screening results into material that requires off-site disposal, material that requires testing, material that can be returned to the subsurface, and material that can be used as cover soil.

Non-impacted soil/fill may be replaced in the excavation or reused onsite in accordance with Section C-7 of this EWP with NYSDEC approval. If field evidence of potentially impacted soil/fill is encountered during intrusive work, the NYSDEC Project Manager will be contacted and the contractor will be directed to stockpile the material on polyethylene sheeting in an accessible location near the impacted area. The location of staged materials will be coordinated with the owner, but will remain within the same general vicinity as the source. Field evidence of impact is defined as having readily identifiable visual or olfactory signs of contamination, including product or elevated PID readings (i.e., sustained readings >5 ppm). All impacted soil/fill removal work will be directed by an experienced QEP. Removal and stockpiling will continue until visually impacted soil/fill is removed from the limits of the planned excavation or NYSDEC agrees that no further removal of soil/fill is required. If the impact extends beyond the proposed limits of the excavation the property owner will be consulted and a plan for delineation and remediation of the remaining impacted material will be developed.

C-3: STOCKPILE METHODS

Excavated soils will be segregated, based on field screening and its status at the time of the excavation work, into material that can be reused as non-impacted material that can be returned to the subsurface (below the final soil cover system) and impacted material that requires treatment or off-site disposal. Soil stockpiles will be continuously encircled with a berm and/or silt fence. Hay bales will be used as needed near catch basins, surface waters and other discharge points.

Stockpiles will be kept covered at all times with appropriately anchored tarps. Stockpiles will be routinely inspected and damaged tarp covers will be promptly replaced.

Stockpiles will be inspected at a minimum once each week and after every storm event. Results of inspections will be recorded in a logbook and maintained at the site and available for inspection by NYSDEC.

C-4: MATERIALS EXCAVATION AND LOAD OUT

A qualified environmental professional or person under their supervision will oversee all invasive work and the excavation and load-out of all excavated material. The owner of the property and its contractors are solely responsible for safe execution of all invasive and other work performed under this Plan, however any entity performing intrusive work on the site is required to abide by the requirements identified herein. The presence of utilities and easements on the site will be investigated by the qualified environmental professional. It will be determined whether a risk or impediment to the planned work under this SMP is posed by utilities or easements on the site.

Loaded vehicles leaving the site will be appropriately lined, tarped, securely covered, manifested, and placarded in accordance with appropriate Federal, State, local, and NYSDOT requirements and all other applicable transportation requirements.

A truck wash will be operated on-site. The qualified environmental professional will be responsible for ensuring that all outbound trucks will be washed at the truck wash before leaving the site until the activities performed under this section are complete. Locations where vehicles enter or exit the site shall be inspected daily for evidence of off-site soil tracking. The qualified environmental professional will be responsible for ensuring that all egress points for truck and equipment transport from the site are clean of dirt and other materials derived from the site during intrusive excavation activities. Cleaning of the adjacent streets will be performed as needed to maintain a clean condition with respect to site-derived materials.

C-5: MATERIALS TRANSPORT OFF-SITE

All transport of materials will be performed by licensed haulers in accordance with appropriate local, State, and Federal regulations, including 6 NYCRR Part 364. Haulers will be appropriately licensed and trucks properly placarded.

Material transported by trucks exiting the site will be secured with tight-fitting covers. Loose-fitting canvas-type truck covers will be prohibited. If loads contain wet material capable of producing free liquid, truck liners will be used.

All trucks will be washed prior to leaving the site. Truck wash waters will be collected and disposed of off-site in an appropriate manner.

Truck transport routes will be pre-determined for wastes designated as non-hazardous and requiring offsite transport to a NYSDEC-permitted landfill. The truck transport route to the nearest municipal landfill from the Site is as follows:

To Modern Landfill, 1445 Pletcher Road, Model City, NY

- From the Site, turn right (south) onto South Ogden Street
- Turn left onto Mineral Springs Road
- Take the second left onto Harlem Road
- Turn left onto Clinton Street
- Turn left to merge onto I-190 North toward downtown Buffalo
- Take Exit 25A/RT 265 toward Lewiston
- Turn left on Military Road/RT 265
- Turn right onto Upper Mountain Road
- Turn left onto Indian Hill Rd.
- Slight left onto Model City Rd.
- Turn right onto Swann Rd.
- Turn left onto Harold Rd.
- Turn left onto Pletcher Rd.
- End at 1445 Pletcher Rd.

All trucks loaded with site materials will exit the vicinity of the site using only the approved truck route. This is the most appropriate route and takes into account: (a) limiting transport through residential areas and past sensitive sites; (b) use of city mapped truck routes; (c) prohibiting off-site queuing of trucks entering the facility; (d) limiting total distance to major highways; (e) promoting safety in access to highways; and (f) overall safety

in transport. If an alternate facility is employed the corresponding truck transport route shall be provided to the NYSDEC for approval.

Trucks will be prohibited from stopping and idling in the neighborhood outside the project site. Egress points for truck and equipment transport from the site will be kept clean of dirt and other materials during site remediation and development. Queuing of trucks will be performed on-site in order to minimize off-site disturbance. Off-site queuing will be prohibited.

C-6: MATERIALS DISPOSAL OFF-SITE

All soil/fill/solid waste excavated and removed from the site will be treated as contaminated and regulated material and will be transported and disposed in accordance with all local, State (including 6NYCRR Part 360) and Federal regulations. If disposal of soil/fill from this site is proposed for unregulated off-site disposal (i.e. clean soil removed for development purposes), a formal request with an associated plan will be made to the NYSDEC. Unregulated off-site management of materials from this site will not occur without formal NYSDEC approval.

Off-site disposal locations for excavated soils will be identified in the pre-excavation notification. This will include estimated quantities and a breakdown by class of disposal facility if appropriate, i.e. hazardous waste disposal facility, solid waste landfill, petroleum treatment facility, C/D recycling facility, etc. Actual disposal quantities and associated documentation will be reported to the NYSDEC in the Periodic Review Report. This documentation will include: waste profiles, test results, facility acceptance letters, manifests, bills of lading, and facility receipts.

Non-hazardous historic fill and contaminated soils taken off-site will be handled, at minimum, as a Municipal Solid Waste per 6NYCRR Part 360-1.2. Material that does not meet Track 1 unrestricted SCOs is prohibited from being taken to a New York State recycling facility (6NYCRR Part 360-16 Registration Facility).

C-7: MATERIALS REUSE ON-SITE

"Reuse on-Site" means reuse of material that originates at the Site and which does not leave the Site during excavation. Upon NYSDEC-approval, on-site reuse of soil/fill material is acceptable provided that the material does not exhibit visual or olfactory evidence

of contamination and photoionization detector (PID) measurements of the atmosphere at the soil/fill interface do not exceed 5 parts per million (ppm) above background. The qualified environmental professional will ensure that procedures defined for materials reuse in this SMP are followed and that unacceptable material does not remain on-site. Contaminated on-site material, including historic fill and contaminated soil, that is acceptable for re-use on-site will be placed below the demarcation layer or impervious surface, and will not be reused within a cover soil layer, within landscaping berms, or as backfill for subsurface utility lines.

Any demolition material proposed for reuse on-site will be sampled for asbestos and the results will be reported to the NYSDEC for acceptance. Concrete crushing or processing on-site will not be performed without prior NYSDEC approval. Organic matter (wood, roots, stumps, etc.) or other solid waste derived from clearing and grubbing of the site will not be reused on-site.

C-8: FLUIDS MANAGEMENT

All liquids to be removed from the site, including excavation dewatering and groundwater monitoring well purge and development waters, will be handled, transported and disposed in accordance with applicable local, State, and Federal regulations. Dewatering, purge, and development fluids will not be recharged back to the land surface or subsurface of the site, but will be managed off-site.

Discharge of water generated during large-scale construction activities to surface waters (i.e. a local pond, stream, or river) will be performed under a SPDES permit.

C-9: COVER SYSTEM RESTORATION

After the completion of soil removal and any other invasive activities the cover system will be restored in a manner that complies with the Decision Document, SMP, or FER. The demarcation layer, consisting of orange snow fencing material or equivalent material will be replaced to provide a visual reference to the top of the 'Remaining Contamination Zone', the zone that requires adherence to special conditions for disturbance of remaining contaminated soils defined in this Site Management Plan. If the type of cover system changes from that which exists prior to the excavation (i.e., a soil cover is replaced by asphalt), this will constitute a modification of the cover element of the remedy and the upper

surface of the 'Remaining Contamination. A figure showing the modified surface will be included in the subsequent Periodic Review Report and in any updates to the Site Management Plan.

C-10: BACKFILL FROM OFF-SITE SOURCES

All materials proposed for import onto the site will be approved by the qualified environmental professional and will be in compliance with provisions in this SMP prior to receipt at the site. Material from industrial sites, spill sites, or other environmental remediation sites or potentially contaminated sites will not be imported to the site.

The criteria under which off-Site material may be used as backfill are presented below.

- **Off-Site Soil/Fill:** Off-Site soil/fill may be used as backfill provided that it originates from: 1) an NYSDEC-approved borrow site; or 2) a known source having no evidence of disposal or releases of hazardous substances, hazardous, toxic or radioactive wastes, or petroleum. In both instances the imported soil must be tested and demonstrated to meet the criteria shown on Table 6 of the SMP in accordance with Appendix 5 of DER-10. In addition, no off-Site materials meeting the definition of a solid waste as defined in 6 NYCRR, Part 360-1.2 (a) shall be used as backfill. The criteria presented in Table 6 of the SMP represent the lesser of the Commercial Soil Cleanup Objectives (SCOs) or levels protective of groundwater quality as published in 6NYCRR Part 375-6.7(d)(c) and 375-6.8.

- **Other Off-Site Material:** Certain material may be imported as backfill, without chemical testing, provided it contains less than 10% (by weight) material that would pass through a size 80 sieve: 1) Rock or stone, consisting of virgin material from a permitted mine or quarry; 2) steel slag under Beneficial Use Determination (BUD) #555-9-152; 3) Recycled concrete, brick, or asphalt from a NYSDEC-registered or permitted C&D debris processing facility (as specified in Section 360-16.1 of 6 NYCRR Part 360) that conforms to Section 304 of the New York State Department of Transportation Standard Specifications Construction and Materials Volume 1 (2002). As stated in Section 360-16.4(b)(2), the facility may only accept recognizable, uncontaminated, non-pulverized C&D debris or C&D debris from other authorized C&D processing facilities. According to Section 360-16.2(c), "uncontaminated" means C&D debris that is not mixed or commingled with other solid waste at the point of generation, processing, or disposal, and that is not contaminated with spills of a petroleum product, hazardous waste, or industrial waste.

As indicated above, off-Site borrow soils shall be tested to assure conformance with the criteria identified on Table 6 of the SMP. A tiered approach based on the volume of impacted soil/fill being excavated will be used to determine the frequency of characterization sampling in accordance with DER-10.

Grab samples will be collected for VOC analysis using En Core samplers (or approved other). For all other required analyses, a minimum of four grab samples will be collected to form a single composite sample. Approximately equal aliquots of the grab samples will be composited in the field using a stainless steel trowel and bowl. The trowel and bowl shall be decontaminated with a non-phosphate detergent (e.g., Alconox®) and potable water wash solution followed by a distilled water rinse between sampling locations. The soil/fill samples will be analyzed for USEPA Target Compound List (TCL) VOCs, TCL SVOCs, pesticides, PCBs, RCRA metals, and cyanide in accordance with USEPA SW-846 Methodology by a NYSDOH ELAP-certified laboratory. Analytical results will be compared to Table 6 of the SMP criteria and provided to the NYSDEC as part of the approval process and reported in the PRR. Analytical results must be maintained on file for review in support of the periodic Institutional and Engineering Control (IC/EC) certification required as part of the final SMP.

All imported soils will meet the backfill and cover soil quality standards established in 6NYCRR 375-6.7(d). Based on an evaluation of the land use, protection of groundwater and protection of ecological resources criteria, the resulting soil quality standards are listed in Table 6 of the SMP. Soils that meet 'exempt' fill requirements under 6 NYCRR Part 360, but do not meet backfill or cover soil objectives for this site, will not be imported onto the site without prior approval by NYSDEC. Solid waste will not be imported onto the site.

Trucks entering the site with imported soils will be securely covered with tight fitting covers. Imported soils will be stockpiled separately from excavated materials and covered to prevent dust releases.

C-11: STORMWATER POLLUTION PREVENTION

If construction activities disturb more than 1 acre of land, the Federal Water Pollution Control Act (as amended, 33 U.S.C. 1251 et. seq.) and the New York State Environmental Conservation Law (Article 17, Titles 7 and 8, and Article 70) would apply.

With some exceptions, operators of construction activities and property development that will result in the disturbance of 1 or more acres of land must obtain coverage under SPDES General Permit for Stormwater Discharges from Construction Activity (GP-0-10-001, expires 01/28/15) prior to the commencement of soil disturbance. (In the case of a remediation site, such as the 154 South Ogden Street Site, soil disturbances associated with remedial activities are exempt from State-issued permits; however functional equivalent approvals, mitigation and compliance measures are required). Also requiring a permit are construction activities disturbing less than 1 acre if they are part of a larger common plan of development or sale with a planned disturbance of equal to or greater than 1 acre, or activities that are designated by the NYSDEC. The NYSDEC can require a permit for construction activities disturbing less than 1 acre based on the potential for contribution to a violation of a water quality standard or for significant contribution of pollutants to waters of the United States.

To obtain coverage under the General Permit, the operator of a construction activity must file a completed Notice of Intent (NOI) with the NYSDEC. Submitting a NOI is an affirmation that a Stormwater Pollution Prevention Plan (SWPPP) has been prepared for the site and will be implemented prior to the commencement of construction activities. Coverage under the General Permit will begin either 5 or 60 business days after receipt of a completed NOI by the NYSDEC. The SWPPP will be implemented during all intrusive activities during Site redevelopment.

For smaller disturbances not subject to SPDES General Permit requirements, erosion controls must be installed as necessary to mitigate impacted stormwater and sediment runoff. These controls (which may include silt fencing around stockpiles, berms, and hay bale checks) will be required in areas of disturbance proximate to surface water bodies and drainage structures, and will also be required if disturbances occur in areas where the surrounding slag/fill is not sufficiently permeable to allow re-infiltration. Erosion and sediment controls shall be installed in accordance with the standards and specifications presented in the SWPPP.

Barriers and hay bale checks will be installed and inspected once a week and after every storm event. All necessary repairs shall be made immediately.

Accumulated sediments will be removed as required to keep the barrier and hay bale check functional. All undercutting or erosion of the silt fence toe anchor shall be repaired immediately with appropriate backfill materials. Manufacturer's recommendations will be

followed for replacing silt fencing damaged due to weathering. Erosion and sediment control measures identified in the SMP shall be observed to ensure that they are operating correctly. Where discharge locations or points are accessible, they shall be inspected to ascertain whether erosion control measures are effective in preventing significant impacts to receiving waters. Results of inspections will be recorded in a logbook and maintained at the site and available for inspection by NYSDEC.

Silt fencing or hay bales will be installed around the entire perimeter of the construction area.

C-12: CONTINGENCY PLAN

If underground tanks or other previously unidentified contaminant sources are found during post-remedial subsurface excavations or development related construction, excavation activities will be suspended until sufficient equipment is mobilized to address the condition.

Sampling will be performed on product, sediment and surrounding soils, etc. as necessary to determine the nature of the material and proper disposal method. Chemical analysis will be performed for full a full list of analytes (TAL metals; TCL volatiles and semi-volatiles, TCL pesticides and PCBs), unless the site history and previous sampling results provide a sufficient justification to limit the list of analytes. In this case, a reduced list of analytes will be proposed to the NYSDEC for approval prior to sampling.

Identification of unknown or unexpected contaminated media identified by screening during invasive site work will be promptly communicated by phone to NYSDEC's Project Manager. Reportable quantities of petroleum product will also be reported to the NYSDEC spills hotline. These findings will be also included in the periodic reports prepared pursuant to Section 4 of the SMP.

C-13: COMMUNITY AIR MONITORING PLAN

As detailed in NYSDOH's Generic Community Air Monitoring Plan (DER-10 Appendix 1A) and Fugitive Dust and Particulate Monitoring Plan (DER-10 Appendix 1B), the following criteria shall also be adhered to during intrusive activities for the protection of the nearby community.

Organic Vapor Community Air Monitoring

Community air monitoring will be performed at the downwind perimeter of the exclusion zone on a continuous basis during intrusive activities performed outdoors that may be reasonably expected to potentially release organic vapors, or when sustained readings are detected in the work zone (i.e., proximate to the source of the intrusive activity). Otherwise, the monitoring will be performed on an hourly basis. A photoionization detector (PID), or other equipment suitable to the types of contaminants known or suspected to be present, capable of calculating 15-minute running average concentrations will be used. All air monitoring equipment will be calibrated at least daily and an upwind concentration will be taken at least daily to establish background conditions. The 15-minute average concentrations will be compared to the levels specified below.

- If the 15-minute ambient air concentration of organic vapors at the downwind perimeter of the exclusion zone exceeds 5 ppm above background, work activities will be halted and monitoring continued. If the organic vapor decreases (per instantaneous readings) below 5 ppm over background, work activities can resume with continued monitoring.
- If the ambient air concentration of organic vapors at the downwind perimeter of the exclusion zone persists at levels above 5 ppm over background but less than 25 ppm, activities must be halted, the source of vapors identified, corrective actions to abate the emissions taken, and monitoring continued. After these steps, work activities can resume provided that: the organic vapor level 200 feet downwind of the exclusion zone or half the distance to the nearest off-site potential receptor or residential or commercial structure, whichever is less (but in no case less than 20 feet), is below 5 ppm over background for the 15-minute average.
- If the organic vapor level is above 25 ppm at the perimeter of the exclusion zone, work activities must be shut down and the following activities will be performed:

- All Emergency Response Contacts as listed in the Site-Wide HASP (Appendix D of the SMP) and the Emergency Response Plan (Appendix A to the Site-Wide HASP) will be advised.
- The local police authorities will immediately be contacted by the Site Health and Safety Officer and advised of the situation.
- Air monitoring will be continued at 1/2 the distance from the exclusion zone to the nearest receptor.

All readings will be recorded and will be available for NYSDEC and NYSDOH personnel to review.

Explosive Vapor Community Air Monitoring

Explosive vapor community air monitoring will be performed at the downwind perimeter of the site on a continuous basis whenever sustained atmospheric concentrations of greater than 10% of the LEL are recorded in the exclusion zone. If sustained atmospheric concentrations of greater than 10% LEL are recorded at the downwind site perimeter, the local Fire Department will be contacted.

Airborne Particulate Community Air Monitoring

Respirable (PM-10) particulate monitoring will be performed on a continuous basis at the upwind and downwind perimeter of the exclusion zone. The monitoring will be performed using real-time monitoring equipment capable of measuring PM-10 and integrating over a period of 15-minutes for comparison to the airborne particulate action levels. The equipment will be equipped with an audible alarm to indicate exceedance of the action level. In addition, fugitive dust migration will be visually assessed during all work activities. All readings will be recorded and will be available for NYSDEC and NYSDOH review. Readings will be interpreted as follows:

- If the downwind PM-10 particulate level is 100 micrograms per cubic meter (ug/m^3) greater than the background (upwind perimeter) reading for the 15-minute period or if airborne dust is observed leaving the work area, then dust suppression techniques must be employed. Work may continue with dust suppression provided that the downwind PM-10 particulate levels do not exceed 150 ug/m^3 above the upwind level and that visible dust is not migrating from the work area.

If after implementation of dust suppression techniques, downwind PM-10 levels are greater than 150 ug/m^3 above the upwind level, work activities must be stopped and dust suppression controls re-evaluated. Work can resume provided that supplemental dust suppression measures and/or other controls are successful in reducing the downwind PM-10 particulate concentration to within 150 ug/m^3 of the upwind level and in preventing visible dust migration.

Air Sampling Stations

A figure showing the location of air sampling stations based on generally prevailing wind conditions will be prepared prior to beginning intrusive activities. The locations will be

adjusted on a daily or more frequent basis based on actual wind directions to provide an upwind and at least two downwind monitoring stations. Because the Site includes a school and a residential area is adjacent to the Site (i.e., sensitive receptors), a fixed monitoring station will be located at the site perimeter, regardless of wind direction.

Exceedances of action levels listed in the CAMP will be reported to NYSDEC and NYSDOH Project Managers.

C-14: ODOR CONTROL PLAN

This odor control plan is capable of controlling emissions of nuisance odors off-site. Specific odor control methods to be used on a routine basis will include various types engineering controls. If nuisance odors are identified at the site boundary, or if odor complaints are received, work will be halted and the source of odors will be identified and corrected. Work will not resume until all nuisance odors have been abated. NYSDEC and NYSDOH will be notified of all odor events and of any other complaints about the project. Implementation of all odor controls, including the halt of work, is the responsibility of the property owner's Remediation Engineer, and any measures that are implemented will be discussed in the Periodic Review Report.

All necessary means will be employed to prevent on- and off-site nuisances. At a minimum, these measures will include: (a) limiting the area of open excavations and size of soil stockpiles; (b) shrouding open excavations with tarps and other covers; and (c) using foams to cover exposed odorous soils. If odors develop and cannot be otherwise controlled, additional means to eliminate odor nuisances will include: (d) direct load-out of soils to trucks for off-site disposal; (e) use of chemical odorants in spray or misting systems; and, (f) use of staff to monitor odors in surrounding neighborhoods.

If nuisance odors develop during intrusive work that cannot be corrected, or where the control of nuisance odors cannot otherwise be achieved due to on-site conditions or close proximity to sensitive receptors, odor control will be achieved by sheltering the excavation and handling areas in a temporary containment structure equipped with appropriate air venting/filtering systems.

C-15: DUST CONTROL PLAN

Dust suppression techniques will be employed as necessary to mitigate fugitive dust from non-vegetated or disturbed soil/fill during all intrusive activities. A dust suppression plan that addresses dust management during invasive on-site work will include, at a minimum, the items listed below:

- Dust suppression will be achieved through the use of a dedicated on-site water truck for road wetting. The truck will be equipped with a water cannon capable of spraying water directly onto off-road areas including excavations and stockpiles.
- Clearing and grubbing of larger sites will be done in stages to limit the area of exposed, unvegetated soils vulnerable to dust production.
- Gravel will be used on roadways to provide a clean and dust-free road surface.
- On-site roads will be limited in total area to minimize the area required for water truck sprinkling.
- Covering or proof-rolling excavated areas and materials after excavation activity ceases.
- Reducing the excavation size and/or number of excavations.

C-16: OTHER NUISANCES

A plan will be developed and utilized by the excavation contractor for all remedial work to ensure compliance with local ordinances, as necessary (e.g. rodent control, noise control).

APPENDIX D

HEALTH & SAFETY PLAN (HASP)
&
COMMUNITY AIR MONITORING PLAN (CAMP)

Health and Safety Plan

154 South Ogden Street Site
Buffalo, New York

August 2014 0249-012-011

Prepared for:

154 South Ogden, LLC

Prepared by:

Benchmark Environmental Engineering & Sciences, PLLC

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SITE HEALTH AND SAFETY PLAN
for
BROWNFIELD CLEANUP PROGRAM

154 SOUTH OGDEN STREET SITE
BCP SITE NO. C915268
BUFFALO, NEW YORK

August 2014 0249-012-011

Prepared for:

154 SOUTH OGDEN, LLC

Prepared By:

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HEALTH & SAFETY PLAN FOR RI ACTIVITIES

154 South Ogden Street Site

BCP Site No. C915268

Table of Contents

ACKNOWLEDGEMENT

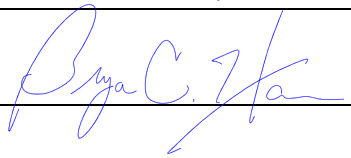
Plan Reviewed by (initial):

Corporate Health and Safety Director: Thomas H. Forbes, P.E.

Project Manager: Bryan C. Hann

Designated Site Safety and Health Officer: Bryan C. Hann

Acknowledgement:
I acknowledge that I have reviewed the information contained in this site-specific Health and Safety Plan, and understand the hazards associated with performance of the field activities described herein. I agree to comply with the requirements of this plan.

NAME (PRINT)	SIGNATURE	DATE
Thomas H. Forbes		08/20/14
Bryan C. Hann		08/20/14

HEALTH & SAFETY PLAN FOR RI ACTIVITIES

154 South Ogden Street Site

BCP Site No. C915268

Table of Contents

Table of Contents

HEALTH & SAFETY PLAN FOR RI ACTIVITIES
154 South Ogden Street Site
BCP Site No. C915268

Table of Contents

LIST OF TABLES

LIST OF FIGURES

APPENDICES

1.0 INTRODUCTION

1.1 General

In accordance with OSHA requirements contained in 29 CFR 1910.120, this Health and Safety Plan (HASP) describes the specific health and safety practices and procedures to be employed by Benchmark Environmental Engineering & Science, PLLC and TurnKey Environmental Restoration, LLC employees (referred to jointly hereafter as "Benchmark-TurnKey") during Remedial Investigation (RI) activities at the 154 South Ogden Street Site located in the City of Buffalo, New York. This HASP presents procedures for Benchmark-TurnKey employees who will be involved with RI field activities; it does not cover the activities of other contractors, subcontractors or other individuals on the Site. These firms will be required to develop and enforce their own HASPs as discussed in Section 2.0. Benchmark-TurnKey accepts no responsibility for the health and safety of contractor, subcontractor, or other personnel.

This HASP presents information on known Site health and safety hazards using available historical information, and identifies the equipment, materials and procedures that will be used to eliminate or control these hazards. Environmental monitoring will be performed during the course of field activities to provide real-time data for on-going assessment of potential hazards.

1.2 Background

The Site is an approximate 21 acre portion of a greater 27 acre parcel located at 154 South Ogden Street near the northwest intersection of Mineral Springs Road in Buffalo, New York (see Figure 1). The property is generally bound to the north by the Buffalo River, to the east by South Ogden Street, to the south by private property and to the west by railroad tracks and vacant property owned by the City of Buffalo. Surrounding property use is primarily residential with some small commercial properties. Historic records indicate that the site was not previously developed; however a portion of the property was previously traversed by the Buffalo River and was filled with concurrent straightening of the river channel.

1.3 Known and Suspected Environmental Conditions

LCS Inc. (LCS) conducted a Phase I Environmental Site Assessment for the subject property in July 2011, and the findings are presented below.

- Railroad tracks were identified adjacent to the Site.
- Multiple debris piles noted dumped on-Site.

EmpireGeo Services, Inc. (EmpireGeo) completed a subsurface geotechnical report and test investigation on the subject property in December 2011, and the findings are presented below:

- Elevated PID readings and presence of industrial fill across the Site.
- Elevated PAHs and heavy metals exceeding Part 375 Industrial SCOs.
- Report notes that a "black sandy material with a sweet chemical odor" was detected at multiple locations.

Benchmark Environmental Engineering and Science, PLLC, (Benchmark) conducted a supplemental Site investigation on the subject property, and the findings are summarized below:

- Petroleum-impacted soils were encountered which necessitated informing the NYSDEC Spill Hotline, Spill File No. 1112887 was opened for the Site
- Elevated PAHS, and metals were detected above Part 375 Restricted-Residential SCOs
- Elevated VOCs and SVOCs were detected above GWQS
- The investigation noted apparent incinerator ash and non-soil fill materials

The RI will be performed in support of the BCP to determine the nature and extent of impacts from known and suspected environmental conditions on this parcel.

1.4 Parameters of Interest

Based on the previous investigations, primary constituents of potential concern (COPCs) in soil and groundwater at the Site include:

- **Inorganic Compound –** The inorganic COPCs potentially present at elevated concentrations are metals, including: arsenic, barium, copper, and lead.

- **Volatile Organic Compounds (VOCs)** – VOCs present at elevated concentration may include Acetone, benzene, 2-butanone, chlorobenzene, 1,2-dichlorobenzene, 1,4-dichlorobenzene, and isopropylbenzene.

- **Semi-Volatile Organic Compounds (SVOCs) –** SVOCs present at elevated concentrations include the Polycyclic Aromatic Hydrocarbons (PAHs) anthracene, benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, dibenzo(a,h)anthracene, fluoranthene, fluorine, naphthalene, phenanthrene, pyrene, and 1,2-dichlorobenzene. Although PAHs are commonly found in urban soil environments, they are present at the Site at concentrations that are significantly elevated compared to typical "background" levels.

1.5 Overview of RI Activities

Benchmark-TurnKey personnel will be on-site to observe and perform RI activities. The field activities to be completed as part of the RI are described below. Planned RI activities are more fully described in the RI Work Plan for the Site.

Remedial Investigation Activities

1. **Surface/Subsurface Soil Sampling:** Benchmark-TurnKey personnel plan to: complete eighteen soil borings to collect subsurface soil samples; and, collect eight surface soil samples.

2. **Monitoring Well Installation/Development and Sampling:** Benchmark-TurnKey will observe the installation of on-Site groundwater monitoring wells; develop the wells, and collect groundwater samples for the purpose of determining the nature and extent of potential COPC impacts.

2.0 ORGANIZATIONAL STRUCTURE

This section of the HASP describes the lines of authority, responsibility and communication as they pertain to health and safety functions at the Site. The purpose of this chapter is to identify the personnel who impact the development and implementation of the HASP and to describe their roles and responsibilities. This section also identifies other contractors and subcontractors involved in work operations and establishes the lines of communications among them for health and safety matters. The organizational structure described in this chapter is consistent with the requirements of 29 CFR 1910.120(b)(2). This section will be reviewed by the Project Manager and updated as necessary to reflect the current organizational structure at this Site.

2.1 Roles and Responsibilities

All Benchmark-Turnkey personnel on the Site must comply with the minimum requirements of this HASP. The specific responsibilities and authority of management, safety and health, and other personnel on this Site are detailed in the following paragraphs.

2.1.1 Corporate Health and Safety Director

The Benchmark-Turnkey Corporate Health and Safety Director is ***Mr. Thomas H. Forbes, P.E***. The Corporate Health and Safety Director responsible for developing and implementing the Health and Safety program and policies for Benchmark Environmental Engineering & Science, PLLC and TurnKey Environmental Restoration, LLC, and consulting with corporate management to ensure adequate resources are available to properly implement these programs and policies. The Corporate Health and Safety Director coordinates Benchmark-TurnKey's Health and Safety training and medical monitoring programs and assists project management and field staff in developing site-specific health and safety plans.

2.1.2 Project Manager

The Project Manager for this Site is ***Mr. Bryan C. Hann.*** The Project Manager has the responsibility and authority to direct all Benchmark-TurnKey work operations at the Site. The Project Manager coordinates safety and health functions with the Site Safety and

Health Officer, and bears ultimate responsibility for proper implementation of this HASP. He may delegate authority to expedite and facilitate any application of the program, including modifications to the overall project approach as necessary to circumvent unsafe work conditions. Specific duties of the Project Manager include:

- Preparing and coordinating the Site work plan.
- Providing Benchmark-Turnkey workers with work assignments and overseeing their performance.
- Coordinating health and safety efforts with the Site Safety and Health Officer (SSHO).
- Reviewing the emergency response coordination plan to assure its effectiveness.
- Serving as the primary liaison with Site contractors and the property owner.

2.1.3 Site Safety and Health Officer

The Site Safety and Health Officer (SSHO) for this Site is ***Mr. Bryan C. Hann***. The qualified alternate SSHO is ***Mr. Richard L. Dubisz.*** The SSHO reports to the Project Manager. The SSHO is on-site or readily accessible to the Site during all work operations and has the authority to halt Site work if unsafe conditions are detected. The specific responsibilities of the SSHO are:

- Managing the safety and health functions for Benchmark-TurnKey personnel on the Site.
- Serving as the point of contact for safety and health matters.
- Ensuring that Benchmark-Turnkey field personnel working on the Site have received proper training (per 29 CFR Part 1910.120(e)), that they have obtained medical clearance to wear respiratory protection (per 29 CFR Part 1910.134), and that they are properly trained in the selection, use and maintenance of personal protective equipment, including qualitative respirator fit testing.
- Performing or overseeing Site monitoring as required by the HASP.

- Assisting in the preparation and review of the HASP.
- Maintaining site-specific safety and health records as described in this HASP.
- Coordinating with the Project Manager, Site Workers, and Contractor's SSHO as necessary for safety and health efforts.

2.1.4 Site Workers

Site workers are responsible for: complying with this HASP or a more stringent HASP, if appropriate (i.e., Contractor and Subcontractor's HASP); using proper PPE; reporting unsafe acts and conditions to the SSHO; and following the safety and health instructions of the Project Manager and SSHO.

2.1.5 Other Site Personnel

Other Site personnel who will have health and safety responsibilities will include the Drilling Contractor, who will be responsible for developing, implementing and enforcing a Health and Safety Plan equally stringent or more stringent than Benchmark-Turnkey's HASP. Benchmark-Turnkey assumes no responsibility for the health and safety of anyone outside its direct employ. Each Contractor's HASP shall cover all non- Benchmark-Turnkey Site personnel. Each Contractor shall assign a SSHO who will coordinate with Benchmark-TurnKey's SSHO as necessary to ensure effective lines of communication and consistency between contingency plans.

In addition to Benchmark-Turnkey and Contractor personnel, other individuals who may have responsibilities in the work zone include subcontractors and governmental agencies performing Site inspection work (i.e., the New York State Department of Environmental Conservation). The Contractor shall be responsible for ensuring that these individuals have received OSHA-required training (29 CFR 1910.120(e)), including initial, refresher and site-specific training, and shall be responsible for the safety and health of these individuals while they are on-site.

3.0 HAZARD EVALUATION

Due to the presence of certain contaminants at the Site, the possibility exists that workers will be exposed to hazardous substances during field activities. The principal points of exposure would be through direct contact with and incidental ingestion of soil, and through the inhalation of contaminated particles or vapors. Other points of exposure may include direct contact with groundwater. In addition, the use of drilling and/or medium to large-sized construction equipment (e.g., excavator) will also present conditions for potential physical injury to workers. Further, since work will be performed outdoors, the potential exists for heat/cold stress to impact workers, especially those wearing protective equipment and clothing. Adherence to the medical evaluations, worker training relative to chemical hazards, safe work practices, proper personal protection, environmental monitoring, establishment work zones and Site control, appropriate decontamination procedures and contingency planning outlined herein will reduce the potential for chemical exposures and physical injuries.

3.1 Chemical Hazards

As discussed in Section 1.3, historic activities have potentially resulted in impacts to Site soils and groundwater. Visual and olfactory observations, as well as elevated PID readings, indicate a potential VOC impact to Site soil. In addition to VOCs, soil and groundwater may be impacted by SVOCs (PAHs) and/or inorganic compounds due to historic use as a dump, according to USDA Erie county soil maps. Table 1 lists exposure limits for airborne concentrations of the COPCs identified in Section 1.4 of this HASP. Brief descriptions of the toxicology of the prevalent COPCs and related health and safety guidance and criteria are provided below.

1. **Arsenic (CAS #7440-38-2)** is a naturally occurring element and is usually found combined with one or more elements, such as oxygen or sulfur. Inhalation is a more important exposure route than ingestion. First phase exposure symptoms include nausea, vomiting, diarrhea and pain in the stomach. Prolonged contact is corrosive to the skin and mucus membranes. Arsenic is considered a Group A human carcinogen by the USEPA. Exposure via inhalation is associated with an increased risk of lung cancer. Exposure via the oral route is associated with an increased risk of skin cancer.

2. **Barium (CAS #7440-39-3)** a naturally occurring alkaline earth metal that appears silver-yellow when exposed to air. Barium sulfate and barium carbonate are often found in nature and sometimes found naturally in drinking water and food. Other compounds, such as barium chloride, barium nitrate, and barium hydroxide, are manufactured from barium sulfate. Barium sulfate is used in drilling muds and to make paints, bricks, tiles, glass, and rubber. Barium carbonate, barium chloride, and barium hydroxide, are used to make ceramics, insect and rat poisons, and additives for oils and fuels; in the treatment of boiler water; in the production of barium greases; as a component in sealants, paper manufacturing, and sugar refining; in animal and vegetable oil refining. Ingestion of barium may result in: vomiting, abdominal cramps, diarrhea, difficulties in breathing, increased or decreased blood pressure, numbness around the face, and muscle weakness.

3. **Copper (CAS #7440-50-8)** is a naturally occurring and essential element in plants and animals. However high levels of copper can be harmful. Breathing high levels of copper can cause irritation of the nose and throat. Ingesting high levels of copper can cause nausea, vomiting, and diarrhea. Very high doses of copper can cause damage to the liver and kidneys, and possibly death.

4. **Lead (CAS #7439-92-1**) can affect almost every organ and system in our bodies. The most sensitive is the central nervous system, particularly in children. Lead also damages kidneys and the immune system. The effects are the same whether it is breathed or swallowed. Lead may decrease reaction time, cause weakness in fingers, wrists or ankles and possibly affect memory. Lead may cause anemia.

5. Volatile Organic Compounds:

- **Acetone (CAS #67-64-1)** is an organic compound, a colorless, mobile, flammable liquid with a distinct smell and taste. Used to make plastics, fibers, drugs, and other chemicals. Inhalation of moderate to high levels of acetone for short periods of time can cause nose, throat, lung, and eye irritation; headaches; light headedness; confusion; increased pulse rate; effects on blood; nausea; vomiting; unconsciousness and possibly coma. Ingestion of very high levels of acetone can result in unconsciousness and damage to the skin of the mouth. Dermal contact can result in irritation and damage to the skin.

- **Benzene (CAS #71-43-2)** poisoning occurs most commonly through inhalation of the vapor, however, benzene can also penetrate the skin and poison in that way. Locally, benzene has a comparatively strong irritating effect, producing erythema and burning and, in more severe cases, edema

and blistering. Exposure to high concentrations of the vapor (i.e., 3,000 ppm or higher) may result in acute poisoning characterized by the narcotic action of benzene on the central nervous system. In acute poisoning, symptoms include confusion, dizziness, tightening of the leg muscles, and pressure over the forehead. Chronic exposure to benzene (i.e., long-term exposure to concentrations of 100 ppm or less) may lead to damage of the blood-forming system. Benzene is very flammable when exposed to heat or flame and can react vigorously with oxidizing materials.

- **2-Butanone (CAS #78-93-3)** also known as Methyl Ethyl Ketone (MEK) is an organic compound, a colorless liquid with a sharp, sweet odor. It is used in paints, coatings, glues, and cleaning agents. Exposure to 2-butanone may result in irritation of the nose, throat, skin and eyes.

- **Chlorobenzene (CAS #108-90-7)** is a colorless, faint almond-like odor, flammable liquid. Acute exposure predominantly results in irritation of the respiratory tract, eyes and skin.

- **Dichlorobenzene (1,1-, 1,2-, and 1,3-) (CAS #106-46-7, 95-50-1, 541-73-1)** are colorless to pale yellow, pleasant odor, flammable liquid. Acute exposure predominantly results in irritation of the respiratory tract, eyes and skin. Symptoms may include headache, nausea, swelling of the eyes, runny nose, drowsiness, central nervous system depression, kidney and liver damage, unconsciousness and death.

- **Isopropylbenzene (CAS #98-82-8)** is a colorless, gasoline-like odor flammable liquid. Acute exposure typically results in irritation of the eyes, mucous membranes and upper respiratory tract. Can be absorbed through the skin. Possible central nervous system depressant. Symptoms may include irritation, dizziness, nausea, lack of coordination and narcosis.

6. **Polycyclic Aromatic Hydrocarbons (PAHs)** are formed as a result of the pyrolysis and incomplete combustion of organic matter such as fossil fuel. PAH aerosols formed during the combustion process disperse throughout the atmosphere, resulting in the deposition of PAH condensate in soil, water and on vegetation. In addition, several products formed from petroleum processing operations (e.g., roofing materials and asphalt) also contain elevated levels of PAHs. Hence, these compounds are widely dispersed in the environment. PAHs are characterized by a molecular structure containing three or more fused, unsaturated carbon rings. Seven of the PAHs are classified by USEPA as probable human carcinogens (USEPA Class B2). These are: benzo(a)pyrene;

benzo(a)anthracene; benzo(b)fluoranthene; benzo(k)fluoranthene; chrysene; dibenzo(a,h)anthracene; and indeno(1,2,3-cd)pyrene. The primary route of exposure to PAHs is through incidental ingestion and inhalation of contaminated particulates. PAHs are characterized by an organic odor, and exist as oily liquids in pure form. Acute exposure symptoms may include acne-type blemishes in areas of the skin exposed to sunlight.

With respect to the anticipated RI activities discussed in Section 1.5, possible routes of exposure to the above-mentioned contaminants are presented in Table 2. The use of proper respiratory equipment, as outlined in Section 7.0 of this HASP, will minimize the potential for exposure to airborne contamination. Exposure to contaminants through dermal and other routes will also be minimized through the use of protective clothing (Section 7.0), safe work practices (Section 6.0), and proper decontamination procedures (Section 12.0).

3.2 Physical Hazards

RI field activities at the 154 South Ogden Site may present the following physical hazards:

- The potential for physical injury during heavy construction equipment use, such as backhoes, excavators, and drilling equipment.
- The potential for heat/cold stress to employees during the summer/winter months (see Section 10.0).
- The potential for slip and fall injuries due to rough, uneven terrain and/or open excavations.

These hazards represent only some of the possible means of injury that may be present during RI operations and sampling activities at the Site. Since it is impossible to list all potential sources of injury, it shall be the responsibility of each individual to exercise proper care and caution during all phases of the work.

4.0 TRAINING

4.1 Site Workers

All personnel performing RI activities at the Site (such as, but not limited to, equipment operators, general laborers, and drillers) and who may be exposed to hazardous substances, health hazards, or safety hazards and their supervisors/managers responsible for the Site shall receive training in accordance with 29 CFR 1910.120(e) before they are permitted to engage in operations in the exclusion zone or contaminant reduction zone. This training includes an initial 40-hour Hazardous Waste Site Worker Protection Course, an 8-hour Annual Refresher Course subsequent to the initial 40-hour training, and 3 days of actual field experience under the direct supervision of a trained, experienced supervisor. Additional site-specific training shall also be provided by the SSHO prior to the start of field activities. A description of topics to be covered by this training is provided below.

4.1.1 Initial and Refresher Training

Initial and refresher training is conducted by a qualified instructor as specified under OSHA 29 CFR 1910.120(e)(5), and is specifically designed to meet the requirements of OSHA 29 CFR 1910.120(e)(3) and 1910.120(e)(8). The training covers, as a minimum, the following topics:

- OSHA HAZWOPER regulations.
- Site safety and hazard recognition, including chemical and physical hazards.
- Medical monitoring requirements.
- Air monitoring, permissible exposure limits, and respiratory protection level classifications.
- Appropriate use of personal protective equipment (PPE), including chemical compatibility and respiratory equipment selection and use.
- Work practices to minimize risk.
- Work zones and Site control.

- Safe use of engineering controls and equipment.
- Decontamination procedures.
- Emergency response and escape.
- Confined space entry procedures.
- Heat and cold stress monitoring.
- Elements of a Health and Safety Plan.
- Spill containment.

Initial training also incorporates workshops for PPE and respiratory equipment use (Levels A, B and C), and respirator fit testing. Records and certification received from the course instructor documenting each employee's successful completion of the training identified above are maintained on file at Benchmark-TurnKey's Buffalo, NY office. Contractors and Subcontractors are required to provide similar documentation of training for all their personnel who will be involved in on-site work activities.

Any employee who has not been certified as having received health and safety training in conformance with 29 CFR 1910.120(e) is prohibited from working in the exclusion and contamination reduction zones, or to engage in any on-site work activities that may involve exposure to hazardous substances or wastes.

4.1.2 Site Training

Site workers are given a copy of the HASP and provided a site-specific briefing prior to the commencement of work to ensure that employees are familiar with the HASP and the information and requirements it contains. The Site briefing shall be provided by the SSHO prior to initiating field activities and shall include:

- Names of personnel and alternates responsible for Site safety and health.
- Safety, health and other hazards present on the Site.
- The site lay-out including work zones and places of refuge.

- The emergency communications system and emergency evacuation procedures.
- Use of PPE.
- Work practices by which the employee can minimize risks from hazards.
- Safe use of engineering controls and equipment on the site.
- Medical surveillance, including recognition of symptoms and signs of over-exposure as described in Chapter 5 of this HASP.
- Decontamination procedures as detailed in Chapter 12 of this HASP.
- The emergency response plan as detailed in Chapter 15 of this HASP.
- Confined space entry procedures, if required, as detailed in Chapter 13 of this HASP.
- The spill containment program as detailed in Chapter 9 of this HASP.
- Site control as detailed in Chapter 11 of this HASP.

Supplemental health and safety briefings will also be conducted by the SSHO on an as-needed basis during the course of the work. Supplemental briefings are provided as necessary to notify employees of any changes to this HASP as a result of information gathered during ongoing Site characterization and analysis. Conditions for which the SSHO may schedule additional briefings include, but are not limited to: a change in Site conditions (e.g., based on monitoring results); changes in the work schedule/plan; newly discovered hazards; and safety incidents occurring during Site work.

4.2 Supervisor Training

On-site safety and health personnel who are directly responsible for or who supervise the safety and health of workers engaged in hazardous waste operations (i.e., SSHO) shall receive, in addition to the appropriate level of worker training described in Section 4.1, above, 8 additional hours of specialized supervisory training, in compliance with 29 CFR 1910.120(e)(4).

4.3 Emergency Response Training

Emergency response training is addressed in Appendix A of this HASP, Emergency Response Plan.

4.4 Site Visitors

Each Contractor's SSHO will provide a site-specific briefing to all Site visitors and other non-Benchmark-Turnkey personnel who enter the Site beyond the Site entry point. The site-specific briefing will provide information about Site hazards, the Site layout including work zones and places of refuge, the emergency communications system and emergency evacuation procedures, and other pertinent safety and health requirements as appropriate.

Site visitors will not be permitted to enter the exclusion zone or contaminant reduction zones unless they have received the level of training required for Site workers as described in Section 4.1.

5.0 MEDICAL MONITORING

Medical monitoring examinations are provided to Benchmark-Turnkey employees as stipulated under 29 CFR Part 1910.120(f). These exams include initial employment, annual and employment termination physicals for all Benchmark-Turnkey employees involved in hazardous waste site field operations. Post-exposure examinations are also provided for employees who may have been injured, received a health impairment, or developed signs or symptoms of over-exposure to hazardous substances, or were accidentally exposed to substances at concentrations above the permissible exposure limits without necessary personal protective equipment. Such exams are performed as soon as possible following development of symptoms or the known exposure event.

Medical evaluations are performed by Health Works WNY, an occupational health care provider under contract with Benchmark-TurnKey. Health Works WNY's local facility is located at 1900 Ridge Road, West Seneca, New York 14224. The facility can be reached at (716) 823-5050 to schedule routine appointments or post-exposure examinations.

Medical evaluations are conducted according to the Benchmark-TurnKey Medical Monitoring Program and include an evaluation of the workers' ability to use respiratory protective equipment. The examinations include:

- Occupational/medical history review.
- Physical exam, including vital sign measurement.
- Spirometry testing.
- Eyesight testing.
- Audio testing (minimum baseline and exit, annual for employees routinely exposed to greater than 85db).
- EKG (for employees >40 yrs age or as medical conditions dictate).
- Chest X-ray (baseline and exit, and every 5 years).
- Blood biochemistry (including blood count, white cell differential count, serum multiplastic screening).

- Medical certification of physical requirements (i.e., sight, musculoskeletal, cardiovascular) for safe job performance and to wear respiratory protection equipment.

The purpose of the medical evaluation is to determine an employee's fitness for duty on hazardous waste sites; and to establish baseline medical data.

In conformance with OSHA regulations, Benchmark-Turnkey will maintain and preserve medical records for a period of 30 years following termination of employment. Employees are provided a copy of the physician's post-exam report, and have access to their medical records and analyses.

6.0 SAFE WORK PRACTICES

All Benchmark-Turnkey employees shall conform to the following safe work practices during all on-site work activities conducted within the exclusion and contamination reduction zones:

- Eating, drinking, chewing gum or tobacco, smoking, or any practice that increases the probability of hand-to-mouth contact is strictly prohibited.

- The hands and face must be thoroughly washed upon leaving the work area and prior to engaging in any activity indicated above.

- Respiratory protective equipment and clothing must be worn by all personnel entering the Site as required by the HASP or as modified by the Site safety officer. Excessive facial hair (i.e., beards, long mustaches or sideburns) that interferes with the satisfactory respirator-to-face seal is prohibited.

- Contact with surfaces/materials either suspected or known to be contaminated will be avoided to minimize the potential for transfer to personnel, cross contamination and need for decontamination.

- Medicine and alcohol can synergize the effects of exposure to toxic chemicals. Due to possible contraindications, use of prescribed drugs should be reviewed with the Benchmark-TurnKey occupational physician. Alcoholic beverage and illegal drug intake are strictly forbidden during the workday.

- All personnel shall be familiar with standard operating safety procedures and additional instructions contained in this Health and Safety Plan.

- On-site personnel shall use the "buddy" system. No one may work alone (i.e., out of earshot or visual contact with other workers) in the exclusion zone.

- Personnel and equipment in the contaminated area shall be minimized, consistent with effective Site operations.

- All employees have the obligation to immediately report and if possible, correct unsafe work conditions.

- Use of contact lenses on-site will not be permitted. Spectacle kits for insertion into full-face respirators will be provided for Benchmark-TurnKey employees, as requested and required.

The recommended specific safety practices for working around the contractor's equipment (e.g., backhoes, bulldozers, excavators, drill rigs etc.) are as follows:

- Although the Contractor and subcontractors are responsible for their equipment and safe operation of the Site, Benchmark-TurnKey personnel are also responsible for their own safety.
- Subsurface work will not be initiated without first clearing underground utility services.
- Heavy equipment should not be operated within 20 feet of overhead wires. This distance may be increased if windy conditions are anticipated or if lines carry high voltage. The Site should also be sufficiently clear to ensure the project staff can move around the heavy machinery safely.
- Care should be taken to avoid overhead wires when moving heavy-equipment from location to location.
- Hard hats, safety boots and safety glasses should be worn at all times in the vicinity of heavy equipment. Hearing protection is also recommended.
- The work Site should be kept neat. This will prevent personnel from tripping and will allow for fast emergency exit from the Site.
- Proper lighting must be provided when working at night.
- Construction activities should be discontinued during an electrical storm or severe weather conditions.
- The presence of combustible gases should be checked before igniting any open flame.
- Personnel shall stand upwind of any construction operation when not immediately involved in sampling/logging/observing activities.

Personnel will not approach the edge of an unsecured trench/excavation closer than 2 feet.

7.0 PERSONAL PROTECTIVE EQUIPMENT

7.1 Equipment Selection

Personal protective equipment (PPE) will be donned when work activities may result in exposure to physical or chemical hazards beyond acceptable limits, and when such exposure can be mitigated through appropriate PPE. The selection of PPE will be based on an evaluation of the performance characteristics of the PPE relative to the requirements and limitations of the Site, the task-specific conditions and duration, and the hazards and potential hazards identified at the Site.

Equipment designed to protect the body against contact with known or suspect chemical hazards are grouped into four categories according to the degree of protection afforded. These categories, designated A through D consistent with United States Environmental Protection Agency (USEPA) Level of Protection designation, are:

- **Level A:** Should be selected when the highest level of respiratory, skin and eye protection is needed.
- **Level B:** Should be selected when the highest level of respiratory protection is needed, but a lesser level of skin protection is required. Level B protection is the minimum level recommended on initial Site entries until the hazards have been further defined by on-site studies. Level B (or Level A) is also necessary for oxygen-deficient atmospheres.
- **Level C:** Should be selected when the types of airborne substances are known, the concentrations have been measured and the criteria for using air-purifying respirators are met. In atmospheres where no airborne contaminants are present, Level C provides dermal protection only.
- **Level D:** Should not be worn on any Site with elevated respiratory or skin hazards. This is generally a work uniform providing minimal protection.

OSHA requires the use of certain PPE under conditions where an immediate danger to life and health (IDLH) may be present. Specifically, OSHA 29 CFR 1910.120(g)(3)(iii) requires use of a positive pressure self-contained breathing apparatus, or positive pressure air-line respirator equipped with an escape air supply when chemical exposure levels present a substantial possibility of immediate serious injury, illness or death, or impair the ability to

escape. Similarly, OSHA 29 CFR 1910.120(g)(3)(iv) requires donning totally-encapsulating chemical protective suits (with a protection level equivalent to Level A protection) in conditions where skin absorption of a hazardous substance may result in a substantial possibility of immediate serious illness, injury or death, or impair the ability to escape.

In situations where the types of chemicals, concentrations, and possibilities of contact are unknown, the appropriate level of protection must be selected based on professional experience and judgment until the hazards can be further characterized. The individual components of clothing and equipment must be assembled into a full protective ensemble to protect the worker from site-specific hazards, while at the same time minimizing hazards and drawbacks of the personal protective gear itself. Ensemble components are detailed below for levels A/B, C, and D protection.

7.2 Protection Ensembles

7.2.1 Level A/B Protection Ensemble

Level A/B ensembles include similar respiratory protection, however Level A provides a higher degree of dermal protection than Level B. Use of Level A over Level B is determined by: comparing the concentrations of identified substances in the air with skin toxicity data, and assessing the effect of the substance (by its measured air concentrations or splash potential) on the small area of the head and neck unprotected by Level B clothing.

The recommended PPE for level A/B is:

- Pressure-demand, full-face piece self-contained breathing apparatus (MSHA/-NIOSH approved) or pressure-demand supplied-air respirator with escape self-contained breathing apparatus (SCBA).
- Chemical-resistant clothing. For Level A, clothing consists of totally-encapsulating chemical resistant suit. Level B incorporates hooded one-or two-piece chemical splash suit.
- Inner and outer chemical resistant gloves.
- Chemical-resistant safety boots/shoes.

- Hardhat.

7.2.2 Level C Protection Ensemble

Level C protection is distinguished from Level B by the equipment used to protect the respiratory system, assuming the same type of chemical-resistant clothing is used. The main selection criterion for Level C is that conditions permit wearing an air-purifying device. The device (when required) must be an air-purifying respirator (MSHA/NIOSH approved) equipped with filter cartridges. Cartridges must be able to remove the substances encountered. Respiratory protection will be used only with proper fitting, training and the approval of a qualified individual. In addition, an air-purifying respirator can be used only if: oxygen content of the atmosphere is at least 19.5% in volume; substances are identified and concentrations measured; substances have adequate warning properties; the individual passes a qualitative fit-test for the mask; and an appropriate cartridge/canister is used, and its service limit concentration is not exceeded.

Recommended PPE for Level C conditions includes:

- Full-face piece, air-purifying respirator equipped with MSHA and NIOSH approved organic vapor/acid gas/dust/mist combination cartridges or as designated by the SSHO.
- Chemical-resistant clothing (hooded, one or two-piece chemical splash suit or disposable chemical-resistant one-piece suit).
- Inner and outer chemical-resistant gloves.
- Chemical-resistant safety boots/shoes.
- Hardhat.

An air-monitoring program is part of all response operations when atmospheric contamination is known or suspected. It is particularly important that the air be monitored thoroughly when personnel are wearing air-purifying respirators. Continual surveillance using direct-reading instruments is needed to detect any changes in air quality necessitating a higher level of respiratory protection.

7.2.3 Level D Protection Ensemble

As indicated above, Level D protection is primarily a work uniform. It can be worn in areas where only boots can be contaminated, where there are no inhalable toxic substances and where the atmospheric contains at least 19.5% oxygen.

Recommended PPE for Level D includes:

- Coveralls.
- Safety boots/shoes.
- Safety glasses or chemical splash goggles.
- Hardhat.
- Optional gloves; escape mask; face shield.

7.2.4 Recommended Level of Protection for Site Tasks

Based upon current information regarding both the contaminants suspected to be present at the Site and the various tasks that are included in the remedial activities, the minimum required levels of protection for these tasks shall be as identified in Table 3.

8.0 EXPOSURE MONITORING

8.1 General

Based on the results of historic sample analysis and the nature of the proposed work activities at the Site, the possibility exists that organic vapors and/or particulates may be released to the air during intrusive construction activities. Ambient breathing zone concentrations may at times, exceed the permissible exposure limits (PELs) established by OSHA for the individual compounds (see Table 1), in which case respiratory protection will be required. Respiratory and dermal protection may be modified (upgraded or downgraded) by the SSHO based upon real-time field monitoring data.

8.1.1 On-Site Work Zone Monitoring

Benchmark-TurnKey personnel will conduct routine, real-time air monitoring during all intrusive construction phases such as excavation, backfilling, drilling, etc. The work area will be monitored at regular intervals using a photo-ionization detector (PID), combustible gas meter and a particulate meter. Observed values will be recorded and maintained as part of the permanent field record.

Additional air monitoring measurements may be made by Benchmark-TurnKey personnel to verify field conditions during subcontractor oversight activities. Monitoring instruments will be protected from surface contamination during use. Additional monitoring instruments may be added if the situations or conditions change. Monitoring instruments will be calibrated in accordance with manufacturer's instructions before use.

8.1.2 Off-Site Community Air Monitoring

In addition to on-site monitoring within the work zone(s), monitoring at the down-wind portion of the Site perimeter will be conducted. This will provide a real-time method for determination of vapor and/or particulate releases to the surrounding community as a result of ground intrusive investigation work.

Ground intrusive activities are defined by NYSDOH Appendix 1A Generic Community Air Monitoring Plan (Ref. 4) and attached as Appendix C. Ground intrusive activities include soil/waste excavation and handling, test pitting or trenching, and the

installation of soil borings or monitoring wells. Non-intrusive activities include the collection of soil and sediment samples or the collection of groundwater samples from existing wells. Continuous monitoring is required for ground intrusive activities and periodic monitoring is required for non-intrusive activities. Periodic monitoring consists of taking a reading upon arrival at a sample location, monitoring while opening a well cap or overturning soil, monitoring while bailing a well, and taking a reading prior to leaving a sampling location. This may be upgraded to continuous if the sampling location is in close proximity to individuals not involved in the Site activity (i.e., on a curb of a busy street). The action levels below will be used during periodic monitoring.

8.2 Monitoring Action Levels

8.2.1 On-Site Work Zone Action Levels

The PID, or other appropriate instrument(s), will be used by Benchmark-TurnKey personnel to monitor organic vapor concentrations as specified in this HASP. Combustible gas will be monitored with the "combustible gas" option on the combustible gas meter or other appropriate instrument(s). In addition, fugitive dust/particulate concentrations will be monitored during major soil intrusion (viz., well/boring installation) using a real-time particulate monitor as specified in this plan. In the absence of such monitoring, appropriate respiratory protection for particulates shall be donned. Sustained readings obtained in the breathing zone may be interpreted (with regard to other Site conditions) as follows for Benchmark-TurnKey personnel:

- Total atmospheric concentrations of unidentified vapors or gases ranging from 0 to 1 ppm above background on the PID) - Continue operations under Level D (see Appendix A).
- Total atmospheric concentrations of unidentified vapors or gases yielding sustained readings from >1 ppm to 5 ppm above background on the PID (vapors not suspected of containing high levels of chemicals toxic to the skin) - Continue operations under Level C (see Appendix A).
- Total atmospheric concentrations of unidentified vapors or gases yielding sustained readings of >5 ppm to 50 ppm above background on the PID -

Continue operations under Level B (see Attachment 1), re-evaluate and alter (if possible) construction methods to achieve lower vapor concentrations.

- Total atmospheric concentrations of unidentified vapors or gases above 50 ppm on the PID - Discontinue operations and exit the work zone immediately.

The explosimeter will be used to monitor levels of both combustible gases and oxygen during RI activities. Action levels based on the instrument readings shall be as follows:

- Less than 10% LEL - Continue engineering operations with caution.
- 10-25% LEL - Continuous monitoring with extreme caution, determine source/cause of elevated reading.
- Greater than 25% LEL - Explosion hazard, evaluate source and leave the Work Zone.
- 19.5% - 21% oxygen - proceed with extreme caution; attempt to determine potential source of oxygen displacement.
- Less than 19.5% oxygen - leave work zone immediately.
- 21-25% oxygen - Continue engineering operations with caution.
- Greater than 25% oxygen - Fire hazard potential, leave Work Zone immediately.

The particulate monitor will be used to monitor respirable dust concentrations during all intrusive activities and during handling of Site soil/fill. Action levels based on the instrument readings shall be as follows:

- Less than 50 mg/m^3 - Continue field operations.
- 50-150 mg/m^3 - Don dust/particulate mask or equivalent
- Greater than 150 mg/m^3 - Don dust/particulate mask or equivalent. Initiate engineering controls to reduce respirable dust concentration (viz., wetting of excavated soils or tools at discretion of Site Health and Safety Officer).

Readings with the organic vapor analyzer, combustible gas meter, and particulate monitor will be recorded and documented on the appropriate Project Field Forms. All instruments will be calibrated before use on a daily basis and the procedure will be documented on the appropriate Project Field Forms.

8.2.2 Community Air Monitoring Action Levels

In addition to the action levels prescribed in Section 8.2.1 for TurnKey-Benchmark personnel on-site, the following criteria shall also be adhered to for the protection of downwind receptors consistent with NYSDOH requirements (Appendix C):

- **Organic Vapor Perimeter Monitoring**:
  - If the ambient air concentration of total organic vapors at the downwind perimeter of the work area or exclusion zone exceeds 5 parts per million (ppm) above background for the 15-minute average, work activities must be temporarily halted and monitoring continued. If the total organic vapor level readily decreases (per instantaneous readings) below 5 ppm over background, work activities can resume with continued monitoring.
  - If total organic vapor levels at the downwind perimeter of the work area or exclusion zone persist at levels in excess of 5 ppm over background but less than 25 ppm, work activities must be halted, the source of vapors identified, corrective actions taken to abate emissions, and monitoring continued. After these steps, work activities can resume provided that the total organic vapor level 200 feet downwind of the exclusion zone or half the distance to the nearest potential receptor or residential/commercial structure, whichever is less - but in no case less than 20 feet, is below 5 ppm over background for the 15-minute average.
  - If the organic vapor level is above 25 ppm at the perimeter of the work area, activities must be shutdown.
  - All 15-minute readings must be recorded and be available for State (DEC and DOH) personnel to review. Instantaneous readings, if any, used for decision purposes should also be recorded.

- **Special Requirements for Work Within 20 Feet of Potentially Exposed Individuals or Structures**

  - When work areas are within 20 feet of potentially exposed populations or occupied structures, the continuous monitoring locations for VOCs and particulates must reflect the nearest potentially exposed individuals and the location of ventilation system intakes for nearby structures. The use of engineering controls such as vapor/dust barriers, temporary negative-pressure enclosures, or special ventilation devices should be considered to prevent exposures related to the work activities and to control dust and odors. Consideration should be given to implementing the planned activities when potentially exposed populations are at a minimum, such as during weekends or evening hours in non-residential settings.

  - If total VOC concentrations opposite the walls of occupied structures or next to intake vents exceed 1 ppm, monitoring should occur within the occupied structure (s). Background readings in the occupied spaces must be taken prior to commencement of the planned work. Any unusual background readings should be discussed with NYSDOH prior to commencement of the work.

  - If total particulate concentrations opposite the walls of occupied structures or next to intake vents exceed 150 mcg/m3, work activities should be suspended until controls are implemented and are successful in reducing the total particulate concentration to 150 mcg/m3 or less at the monitoring point.

  - Depending upon the nature of contamination and remedial activities, other parameters (e.g., explosivity, oxygen, hydrogen sulfide, carbon monoxide) may also need to be monitored Response levels and actions should be pre-determined, as necessary, for each site.

Additionally, if following the cessation of work and efforts to abate the emission source are unsuccessful, and if sustained organic vapor levels exceed 25 ppm above background within the 20-foot zone for more than 30 minutes, then the **Major Vapor Emission Response Plan** (see below) will automatically be placed into effect.

- **MAJOR VAPOR EMISSION RESPONSE PLAN:**

Upon activation, the following activities will be undertaken:

1. All Emergency Response Contacts as listed in this Health and Safety Plan and the Emergency Response Plan (Appendix A) will be advised.

2. The local police authorities will immediately be contacted by the Site Health and Safety Officer and advised of the situation.

3. The Site Safety and Health Officer will determine if site workers can safely undertake source abatement measures. Abatement measures may include covering the source area with clean fill or plastic sheeting, or consolidating contaminated materials to minimize surface area. The Site Safety and Health Officer will adjust worker personal protective equipment as necessary to protect workers from over-exposure to organic vapors.

The following personnel are to be notified in the listed sequence in the event that a Major Vapor Emission Plan is activated:

Responsible Person	Contact	Phone Number
SSHO	Police	911
SSHO	State Emergency Response Hotline	(800) 457-7362

Additional emergency numbers are listed in the Emergency Response Plan included as Appendix A.

- **EXPLOSIVE VAPORS:**
  - Sustained atmospheric concentrations of greater than 10% LEL in the work area - Initiate combustible gas monitoring at the downwind portion of the Site perimeter.
  - Sustained atmospheric concentrations of greater than 10% LEL at the downwind Site perimeter – Halt work and contact local Fire Department.
- **AIRBORNE PARTICULATE COMMUNITY AIR MONITORING**

- Respirable (PM-10) particulate monitoring will be performed on a continuous basis at the upwind and downwind perimeter of the exclusion zone. The monitoring will be performed using real-time monitoring equipment capable of measuring PM-10 and integrating over a period of 15-minutes for comparison to the airborne particulate action levels. The equipment will be equipped with an audible alarm to indicate exceedance of the action level. In addition, fugitive dust migration will be visually assessed during all work activities. All readings will be recorded and will be available for NYSDEC and NYSDOH review. Readings will be interpreted as follows:

- If the downwind PM-10 particulate level is 100 micrograms per cubic meter (ug/m^3) greater than the background (upwind perimeter) reading for the 15-minute period or if airborne dust is observed leaving the work area, then dust suppression techniques must be employed. Work may continue with dust suppression provided that the downwind PM-10 particulate levels do not exceed 150 ug/m^3 above the upwind level and that visible dust is not migrating from the work area.

- If, after implementation of dust suppression techniques downwind PM-10 levels are greater than 150 ug/m^3 above the upwind level, work activities must be stopped and dust suppression controls re-evaluated. Work can resume provided that supplemental dust suppression measures and/or other controls are successful in reducing the downwind PM-10 particulate concentration to within 150 ug/m^3 of the upwind level and in preventing visible dust migration.

Pertinent emergency response information including the telephone number of the Fire Department is included in the Emergency Response Plan (Appendix A).

9.0 SPILL RELEASE/RESPONSE

This chapter of the HASP describes the potential for and procedures related to spills or releases of known or suspected petroleum and/or hazardous substances on the Site. The purpose of this Section of the HASP is to plan appropriate response, control, counter-measures and reporting, consistent with OSHA requirements in 29 CFR 1910.120(b)(4)(ii)(J) and (j)(1)(viii). The spill containment program addresses the following elements:

- Potential hazardous material spills and available controls.
- Initial notification and evaluation.
- Spill response.
- Post-spill evaluation.

9.1 Potential Spills and Available Controls

An evaluation was conducted to determine the potential for hazardous material and oil/petroleum spills at this Site. For the purpose of this evaluation, hazardous materials posing a significant spill potential are considered to be:

- CERCLA Hazardous Substances as identified in 40 CFR Part 302, where such materials pose the potential for release in excess of their corresponding Reportable Quantity (RQ).
- Extremely Hazardous Substances as identified in 40 CFR Part 355, Appendix A, where such materials pose the potential for release in excess of their corresponding Reportable Quantity (RQ).
- Hazardous Chemicals as defined under Section 311(e) of the Emergency Planning and Community Right-To-Know Act of 1986, where such chemicals are present or will be stored in excess of 10,000 lbs.
- Toxic Chemicals as defined in 40 CFR Part 372, where such chemicals are present or will be stored in excess of 10,000 lbs.

- Chemicals regulated under 6NYCRR Part 597, where such materials pose the potential for release in excess of their corresponding Reportable Quantity (RQ).

Oil/petroleum products are considered to pose a significant spill potential whenever the following situations occur:

- The potential for a "harmful quantity" of oil (including petroleum and non-petroleum-based fuels and lubricants) to reach navigable waters of the U.S. exists (40 CFR Part 112.4). Harmful quantities are considered by USEPA to be volumes that could form a visible sheen on the water or violate applicable water quality standards.

- The potential for any amount of petroleum to reach any waters of NY State, including groundwater, exists. Petroleum, as defined by NY State in 6NYCRR Part 612, is a petroleum-based heat source, energy source, or engine lubricant/maintenance fluid.

- The potential for any release, to soil or water, of petroleum from a bulk storage facility regulated under 6NYCRR Part 612. A regulated petroleum storage facility is defined by NY State as a site having stationary tank(s) and intra-facility piping, fixtures and related equipment with an aggregate storage volume of 1,100 gallons or greater.

The evaluation indicates that, based on Site history and decommissioning records, a hazardous material spill and/or a petroleum product spill is not likely to occur during RI efforts.

9.2 Initial Spill Notification and Evaluation

Any worker who discovers a hazardous substance or oil/petroleum spill will immediately notify the Project Manager and SSHO. The worker will, to the best of his/her ability, report the material involved, the location of the spill, the estimated quantity of material spilled, the direction/flow of the spill material, related fire/explosion incidents, if any, and any associated injuries. The Emergency Response Plan presented in Attachment H2 of this HASP will immediately be implemented if an emergency release has occurred.

Following initial report of a spill, the Project Manager will make an evaluation as to whether the release exceeds RQ levels. If an RQ level is exceeded, the Project Manager will

notify the Site owner and NYSDEC at 1-800-457-7362 within 2 hours of spill discovery. The Project Manager will also determine what additional agencies (e.g., USEPA) are to be contacted regarding the release, and will follow-up with written reports as required by the applicable regulations.

9.3 Spill Response

For all spill situations, the following general response guidelines will apply:

- Only those personnel involved in overseeing or performing containment operations will be allowed within the spill area. If necessary, the area will be roped, ribboned, or otherwise blocked off to prevent unauthorized access.
- Appropriate PPE, as specified by the SSHO, will be donned before entering the spill area.
- Ignition points will be extinguished/removed if fire or explosion hazards exist.
- Surrounding reactive materials will be removed.
- Drains or drainage in the spill area will be blocked to prevent inflow of spilled materials or applied materials.

For minor spills, the Contractor will maintain a Spill Control and Containment Kit in the Field Office or other readily accessible storage location. The kit will consist of, at a minimum, a 50 lb. bag of "speedy dry" granular absorbent material, absorbent pads, shovels, empty 5-gallon pails and an empty open-top 55-gallon drum. Spilled materials will be absorbed, and shoveled into a 55-gallon drum for proper disposal (NYSDEC approval will be secured for on-site treatment of the impacted soils/absorbent materials, if applicable). Impacted soils will be hand-excavated to the point that no visible signs of contamination remains, and will be drummed with the absorbent.

In the event of a major release or a release that threatens surface water, a spill response contractor will be called to the Site. The response contractor may use heavy equipment (e.g., excavator, backhoe, etc.) to berm the soils surrounding the spill Site or create diversion trenching to mitigate overland migration or release to navigable waters. Where feasible, pumps will be used to transfer free liquid to storage containers. Spill

control/cleanup contractors in the Western New York area that may be contacted for assistance include:

- The Environmental Service Group of NY, Inc.: (716) 695-6720
- Environmental Products and Services, Inc.: (716) 447-4700
- Op-Tech: (716) 873-7680

9.4 Post-Spill Evaluation

If a reportable quantity of hazardous material or oil/petroleum is spilled as determined by the Project Manager, a written report will be prepared as indicated in Section 9.2. The report will identify the root cause of the spill, type and amount of material released, date/time of release, response actions, agencies notified and/or involved in cleanup, and procedures to be implemented to avoid repeat incidents. In addition, all re-useable spill cleanup and containment materials will be decontaminated, and spill kit supplies/disposable items will be replenished.

10.0 HEAT/COLD STRESS MONITORING

Since some of the work activities at the Site will be scheduled for both the summer and winter months, measures will be taken to minimize heat/cold stress to Benchmark-TurnKey employees. The Site Safety and Health Officer and/or his or her designee will be responsible for monitoring Benchmark-TurnKey field personnel for symptoms of heat/cold stress.

10.1 Heat Stress Monitoring

Personal protective equipment may place an employee at risk of developing heat stress, a common and potentially serious illnesses often encountered at construction, landfill, waste disposal, industrial or other unsheltered sites. The potential for heat stress is dependent on a number of factors, including environmental conditions, clothing, workload, physical conditioning and age. Personal protective equipment may severely reduce the body's normal ability to maintain temperature equilibrium (via evaporation and convection), and require increased energy expenditure due to its bulk and weight.

Proper training and preventive measures will mitigate the potential for serious illness. Heat stress prevention is particularly important because once a person suffers from heat stroke or heat exhaustion, that person may be predisposed to additional heat related illness. To avoid heat stress, the following steps should be taken:

- Adjust work schedules.
- Modify work/rest schedules according to monitoring requirements.
- Mandate work slowdowns as needed.
- Perform work during cooler hours of the day if possible or at night if adequate lighting can be provided.
- Provide shelter (air-conditioned, if possible) or shaded areas to protect personnel during rest periods.
- Maintain worker's body fluids at normal levels. This is necessary to ensure that the cardiovascular system functions adequately. Daily fluid intake must approximately equal the amount of water lost in sweat (i.e., eight fluid ounces

must be ingested for approximately every 1 lb of weight lost). The normal thirst mechanism is not sensitive enough to ensure that enough water will be consumed to replace lost perspiration. When heavy sweating occurs, workers should be encouraged to drink more.

- Train workers to recognize the symptoms of heat related illness.

Heat-Related Illness - Symptoms:

- Heat rash may result from continuous exposure to heat or humid air.
- Heat cramps are caused by heavy sweating with inadequate electrolyte replacement. Signs and symptoms include: muscle spasms; pain in the hands, feet and abdomen.
- Heat exhaustion occurs from increased stress on various body organs including inadequate blood circulation due to cardiovascular insufficiency or dehydration. Signs and symptoms include: pale, cool, moist skin; heavy sweating; dizziness; nausea; fainting.
- Heat stroke is the most serious form of heat stress. Temperature regulation fails and the body temperature rises to critical levels. Immediate action must be taken to cool the body before serious injury and death occur. Competent medical help must be obtained. Signs and symptoms are: red, hot, usually dry skin; lack of or reduced perspiration; nausea; dizziness and confusion; strong, rapid pulse; coma.

The monitoring of personnel wearing protective clothing should commence when the ambient temperature is 70 degrees Fahrenheit or above. For monitoring the body's recuperative ability to excess heat, one or more of the following techniques should be used as a screening mechanism.

- Heart rate may be measured by the radial pulse for 30 seconds as early as possible in the resting period. The rate at the beginning of the rest period should not exceed 100 beats per minute. If the rate is higher, the next work period should be shortened by 10 minutes (or 33%), while the length of the rest periods stay the same, If the pulse rate is 100 beats per minute at the beginning of the nest rest period, the following work cycle should be further shortened by 33%.
- Body temperature may be measured orally with a clinical thermometer as early as possible in the resting period. Oral temperature at the beginning of the rest

period should not exceed 99.6 degrees Fahrenheit. If it does, the next work period should be shortened by 10 minutes (or 33%), while the length of the rest period remains the same. However, if the oral temperature exceeds 99.6 degrees Fahrenheit at the beginning of the next period, the work cycle may be further shortened by 33%. Oral temperature should be measured at the end of the rest period to make sure that it has dropped below 99.6 degrees Fahrenheit. No Benchmark-TurnKey employee will be permitted to continue wearing semi-permeable or impermeable garments when his/her oral temperature exceeds 100.6 degrees Fahrenheit.

10.2 Cold Stress Monitoring

Exposure to cold conditions may result in frostbite or hypothermia, each of which progresses in stages as shown below.

- **Frostbite** occurs when body tissue (usually on the extremities) begins to freeze. The three states of frostbite are:

  1) **Frost nip** - This is the first stage of the freezing process. It is characterized by a whitened area of skin, along with a slight burning or painful sensation. Treatment consists of removing the victim from the cold conditions, removal of boots and gloves, soaking the injured part in warm water (102 to 108 degrees Fahrenheit) and drinking a warm beverage. Do not rub skin to generate friction/ heat.

  2) **Superficial Frostbite** - This is the second stage of the freezing process. It is characterized by a whitish gray area of tissue, which will be firm to the touch but will yield little pain. The treatment is identical for Frost nip.

  3) **Deep Frostbite** - In this final stage of the freezing process the affected tissue will be cold, numb and hard and will yield little to no pain. Treatment is identical to that for Frost nip.

- **Hypothermia** is a serious cold stress condition occurring when the body loses heat at a rate faster than it is produced. If untreated, hypothermia may be fatal. The stages of hypothermia may not be clearly defined or visible at first, but generally include:

1) Shivering

2) Apathy (i.e., a change to an indifferent or uncaring mood)

3) Unconsciousness

4) Bodily freezing

Employees exhibiting signs of hypothermia should be treated by medical professionals. Steps that can be taken while awaiting help include:

1) Remove the victim from the cold environment and remove wet or frozen clothing. (Do this carefully as frostbite may have started.)

2) Perform active re-warming with hot liquids for drinking (Note: do not give the victim any liquid containing alcohol or caffeine) and a warm water bath (102 to 108 degrees Fahrenheit).

3) Perform passive re-warming with a blanket or jacket wrapped around the victim.

In any potential cold stress situation, it is the responsibility of the Site Health and Safety Officer to encourage the following:

- Education of workers to recognize the symptoms of frostbite and hypothermia.
- Workers should dress warmly, with more layers of thin clothing as opposed to one thick layer.
- Personnel should remain active and keep moving.
- Personnel should be allowed to take shelter in heated areas, as necessary.
- Personnel should drink warm liquids (no caffeine or alcohol if hypothermia has set in).
- For monitoring the body's recuperation from excess cold, oral temperature recordings should occur:

- At the Site Safety Technicians discretion when suspicion is based on changes in a worker's performance or mental status.
- At a workers request.
- As a screening measure, two times per shift, under unusually hazardous conditions (e.g., wind chill less than 20 degrees Fahrenheit or wind chill less than 30 degrees Fahrenheit with precipitation).
- As a screening measure, whenever anyone worker on-site develops hypothermia.

Any person developing moderate hypothermia (a core body temperature of 92 degrees Fahrenheit) will not be allowed to return to work for 48 hours without the recommendation of a qualified medical doctor.

11.0 WORK ZONES AND SITE CONTROL

Work zones around the areas designated for construction activities will be established on a daily basis and communicated to all employees and other Site users by the SSHO. It shall be each Contractor's Site Safety and Health Officer's responsibility to ensure that all Site workers are aware of the work zone boundaries and to enforce proper procedures in each area. The zones will include:

- Exclusion Zone ("Hot Zone") - The area where contaminated materials may be exposed, excavated or handled and all areas where contaminated equipment or personnel may travel. The zone will be delineated by flagging tape. All personnel entering the Exclusion Zone must wear the prescribed level of personal protective equipment identified in Section 7.

- Contamination Reduction Zone - The zone where decontamination of personnel and equipment takes place. Any potentially contaminated clothing, equipment and samples must remain in the Contamination Reduction Zone until decontaminated.

- Support Zone - The part of the site that is considered non-contaminated or "clean." Support equipment will be located in this zone, and personnel may wear normal work clothes within this zone.

In the absence of other task-specific work zone boundaries established by the SSHO, the following boundaries will apply to all investigation and construction activities involving disruption or handling of Site soils or groundwater:

- Exclusion Zone: 50 foot radius from the outer limit of the sampling/construction activity.

- Contaminant Reduction Zone: 100 foot radius from the outer limit of the sampling/construction activity.

- Support Zone: Areas outside the Contaminant Reduction Zone.

Access of non-essential personnel to the Exclusion and Contamination Reduction Zones will be strictly controlled by the SSHO. Only personnel who are essential to the

completion of the task will be allowed access to these areas and only if they are wearing the prescribed level of protection. Entrance of all personnel must be approved by the SSHO.

The SSHO will maintain a Health and Safety Logbook containing the names of Benchmark-TurnKey workers and their level of protection. The zone boundaries may be changed by the SSHO as environmental conditions warrant, and to respond to the necessary changes in work locations on-site.

12.0 DECONTAMINATION

12.1 Decontamination for Benchmark-TurnKey Employees

The degree of decontamination required is a function of a particular task and the environment within which it occurs. The following decontamination procedure will remain flexible, thereby allowing the decontamination crew to respond appropriately to the changing environmental conditions that may arise at the Site. All Benchmark-TurnKey personnel on-site shall follow the procedure below, or the Contractor's procedure (if applicable), whichever is more stringent.

Station 1 - Equipment Drop: Deposit visibly contaminated (if any) re-useable equipment used in the contamination reduction and exclusion zones (tools, containers, monitoring instruments, radios, clipboards, etc.) on plastic sheeting.

Station 2 - Boots and Gloves Wash and Rinse: Scrub outer boots and outer gloves. Deposit tape and gloves in waste disposal container.

Station 3 - Tape, Outer Boot and Glove Removal: Remove tape, outer boots and gloves. Deposit tape and gloves in waste disposal container.

Station 4 - Canister or Mask Change: If worker leaves exclusive zone to change canister (or mask), this is the last step in the decontamination procedure. Worker's canister is exchanged, new outer gloves and boot cover donned, and worker returns to duty.

Station 5 - Outer Garment/Face Piece Removal: Protective suit removed and deposited in separate container provided by Contractor. Face piece or goggles are removed if used. Avoid touching face with fingers. Face piece and/or goggles deposited on plastic sheet. Hard hat removed and placed on plastic sheet.

Station 6 - Inner Glove Removal: Inner gloves are the last personal protective equipment to be removed. Avoid touching the outside of the gloves with bare fingers. Dispose of these gloves in waste disposal container.

Following PPE removal, personnel shall wash hands, face and forearms with absorbent wipes. If field activities proceed for a duration of 6 consecutive months or longer, shower facilities will be provided for worker use in accordance with OSHA 29 CFR

1910.120(n).

12.2 Decontamination for Medical Emergencies

In the event of a minor, non-life threatening injury, personnel should follow the decontamination procedures as defined, and then administer first-aid.

In the event of a major injury or other serious medical concern (e.g., heat stroke), immediate first-aid is to be administered and the victim transported to the hospital in lieu of further decontamination efforts unless exposure to a Site contaminant would be considered "Immediately Dangerous to Life or Health."

12.3 Decontamination of Field Equipment

Decontamination of heavy equipment will be conducted by the Contractor in accordance with his approved Health and Safety Plan in the Contamination Reduction Zone. As a minimum, this will include manually removing heavy soil contamination, followed by steam cleaning on an impermeable pad.

Decontamination of all tools used for sample collection purposes will be conducted by Benchmark-TurnKey personnel. It is expected that all tools will be constructed of nonporous, nonabsorbent materials (i.e., metal), which will aid in the decontamination effort. Any tool or part of a tool made of porous, absorbent material (i.e., wood) will be placed into suitable containers and prepared for disposal.

Decontamination of bailers, split-spoons, spatula knives, and other tools used for environmental sampling and examination shall be as follows:

- Disassemble the equipment
- Water wash to remove all visible foreign matter.
- Wash with detergent.
- Rinse all parts with distilled-deionized water.
- Allow to air dry.
- Wrap all parts in aluminum foil or polyethylene.

13.0 CONFINED SPACE ENTRY

OSHA 29 CFR 1910.146 identifies a confined space as a space that is large enough and so configured that an employee can physically enter and do assigned work, has limited or restricted means for entry and exit, and is not intended for continuous employee occupancy. Confined spaces include, but are not limited to, trenches, storage tanks, process vessels, pits, sewers, tunnels, underground utility vaults, pipelines, sumps, wells, and excavations.

Confined space entry by Benchmark-TurnKey employees is not anticipated to be necessary to complete the RI activities identified in Section 2.0. In the event that the scope of work changes or confined space entry appears necessary, the Project Manager will be consulted to determine if feasible engineering alternatives to confined space entry can be implemented. If confined space entry by Benchmark-TurnKey employees cannot be avoided through reasonable engineering measures, task-specific confined space entry procedures will be developed and a confined-space entry permit will be issued through Benchmark-TurnKey's corporate Health and Safety Director. Benchmark-TurnKey employees shall not enter a confined space without these procedures and permits in place.

14.0 FIRE PREVENTION AND PROTECTION

14.1 General Approach

Recommended practices and standards of the National Fire Protection Association (NFPA) and other applicable regulations will be followed in the development and application of Project Fire Protection Programs. When required by regulatory authorities, the project management will prepare and submit a Fire Protection Plan for the approval of the contracting officers, authorized representative or other designated official. Essential considerations for the Fire Protection Plan will include:

- Proper Site preparation and safe storage of combustible and flammable materials.
- Availability of coordination with private and public fire authorities.
- Adequate job-site fire protection and inspections for fire prevention.
- Adequate indoctrination and training of employees.

14.2 Equipment and Requirements

Fire extinguishers will be provided by each Contractor and are required on all heavy equipment and in each field trailer. Fire extinguishers will be inspected, serviced, and maintained in accordance with the manufacturer's instructions. As a minimum, all extinguishers shall be checked monthly and weighed semi-annually, and recharged if necessary. Recharge or replacement shall be mandatory immediately after each use.

14.3 Flammable and Combustible Substances

All storage, handling or use of flammable and combustible substances will be under the supervision of qualified persons. All tanks, containers and pumping equipment, whether portable or stationary, used for the storage and handling of flammable and combustible liquids, will meet the recommendations of the National Fire Protection Association.

14.4 Hot Work

If the scope of work necessitates welding or blowtorch operation, the hot work permit presented in Appendix B will be completed by the SSHO and reviewed/issued by the Project Manager.

15.0 EMERGENCY INFORMATION

In accordance with OSHA 29 CFR Part 1910, an Emergency Response Plan is attached to this HASP as Appendix A. The hospital route map is presented within Appendix A as Figure 1.

16.0 REFERENCES

1. LCS, Inc. *Citizens Preliminary Environmental Site Assessment, 154 South Ogden Street, Buffalo, New York*. Prepared for RBS Citizens, NA Real Estate Risk Services. July 2011.

2. EmpireGeo Services, Inc. *Geotechnical Report and Environmental Test Pit Investigation, 154 South Ogden Street Site, Buffalo, New York*. December 2011.

3. Benchmark Environmental Engineering and Science, PLLC. *Supplemental Phase II Site Investigation Report, 154 South Ogden Street Site, Buffalo, New York*. March 2012.

4. New York State Department of Health. *Generic Community Air Monitoring Plan, Appendix 1A, NYSDEC DER-10 Technical Guidance for Site Investigation and Remediation.* May 2010.

TABLES

TURNKEY ENVIRONMENTAL RESTORATION, LLC

TABLE 1

TOXICITY DATA FOR CONSTITUENTS OF POTENTIAL CONCERN

154 South Ogden Street Site
BCP Site No. C915268
Buffalo, New York

Parameter	Synonyms	CAS No.	Code	Concentration Limits [1]		
				PEL	TLV	IDLH
Volatile Organic Compounds (VOCs): ppm						
Acetone	2-propanone; dimethyl ketone	67-64-1	*none*	1000	500	2500
Benzene	Benzol, Phenyl hydride	71-43-2	Ca	1	0.5	500
2-Butanone	Methyl ethyl ketone, MEK	78-93-3	*none*	200	200	3000
Chlorobenzene	benzene chloride, monochlorobenzene, Phenyl chloride	108-90-7	*none*	75	10	1000
1,2-Dichlorobenzene	*none*	95-50-1	C	50	25	200
1,4-Dichlorobenzene	p-dichlorobenzene, 1,4-DCB, paradichlorobenzol, paracide, para-zene,di-chloricide, paramoth, PDB	106-46-7	Ca	75	10	150
Isopropylbenzene	Cumene	98-82-8	*none*	50	50	900
Semi-volatile Organic Compounds (SVOCs) [2]***: ppm***						
Anthracene	*none*	120-12-7	*none*	--	--	--
Benzo(a)anthracene	*none*	56-55-3	*none*	--	--	--
Benzo(a)pyrene	*none*	50-32-8	*none*	--	--	--
Benzo(b)fluoranthene	*none*	205-99-2	*none*	--	--	--
Benzo(k)fluoranthene	*none*	207-08-9	*none*	--	--	--
Chrysene	*none*	218-01-9	*none*	--	--	--
Dibenzo(a,h)anthracene	*none*	53-70-3	*none*	--	--	--
Fluoranthene	*none*	206-44-0	*none*	--	--	--
Fluorene	*none*	86-73-7	*none*	--	--	--
Naphthalene	Naphthalin, Tar camphor, White tar	91-20-3	C	10	10	250
Phenanthrene	*none*	85-01-8	*none*	--	--	--
Pyrene	*none*	129-00-0	*none*	--	--	--
1,2-Dichlorobenzene	*none*	95-50-1	C	50	25	200
Inorganic Compounds: mg/m [2]						
Arsenic	*none*	7440-38-2	Ca	0.01	0.01	5
Barium	*none*	7440-39-3	*none*	--	0.5	--
Copper	*none*	7440-50-8	*none*	1	1	100
Lead	*none*	7439-92-1	*none*	0.05	0.15	100

Ca = NIOSH considers constituent to be a potential occupational carcinogen.
C = EPA has classified constituent as a possible human carcinogen.
-- = indicates that an IDLH has not as yet been determined.
TLV = Threshold Limit Value, established by American Conference of Industrial Hygienists (ACGIH),
equals the maximum exposure concentration allowable for 8 hours/day @ 40 hours/week.
TLVs are the amounts of chemicals in the air that almost all healthy adult workers are predicted to be able to tolerate without adverse effects. There are three types.

TLV-TWA (TLV-Time-Weighted Average) which is averaged over the normal eight-hour day/forty-hour work week. (Most TLVs.)

TLV-STEL or Short Term Exposure Limits are 15 minute exposures that should not be exceeded for even an instant.
It indicates a higher exposure that can be tolerated for a short time without adverse effect as long as the total time weighted average is not exceeded.

TLV-C or Ceiling limits are the concentration that should not be exceeded during any part of the working exposure.
Unless the initials "STEL" or "C" appear in the Code column, the TLV value should be considered to be the eight-hour TLV-TWA.
PEL = Permissible Exposure Limit, established by OSHA, equals the maximium exposure conconcentration allowable for 8 hours per day @ 40 hours per week

TABLE 2

POTENTIAL ROUTES OF EXPOSURE TO THE CONSTITUENTS OF POTENTIAL CONCERN

154 South Ogden Street Site
BCP Site No. C915268
Buffalo, New York

Activity [1]	Direct Contact with Soil/Fill	Inhalation of Vapors or Dust	Direct Contact with Groundwater
Remedial Investigation Tasks			
Subsurface Soil Sampling	x	x	
Surface Soil Sampling	x	x	
Monitoring Well Installation/Development and Sampling	x	x	x

Notes:
1. Activity as described in Section 1.5 of the Health and Safety Plan.

TABLE 3

REQUIRED LEVELS OF PROTECTION FOR RI ACTIVITIES

154 South Ogden Street Site
BCP Site No. C915268
Buffalo, New York

Activity	Respiratory Protection [1]	Clothing	Gloves [2]	Boots [2, 3]	Other Required PPE/Modifications [2, 4]
Remedial Investigation Tasks					
Suburface Soil Sampling	Level D (upgrade to Level C if necessary)	Work Uniform or Tyvek	L/N	outer: L inner: STSS	HH SGSS
Surface Soil Sampling	Level D (upgrade to Level C if necessary)	Work Uniform or Tyvek	L/N	outer: L inner: STSS	HH SGSS
Monitoring Well Installation/Development and Sampling	Level D (upgrade to Level C if necessary)	Work Uniform or Tyvek	L/N	outer: L inner: STSS	SGSS

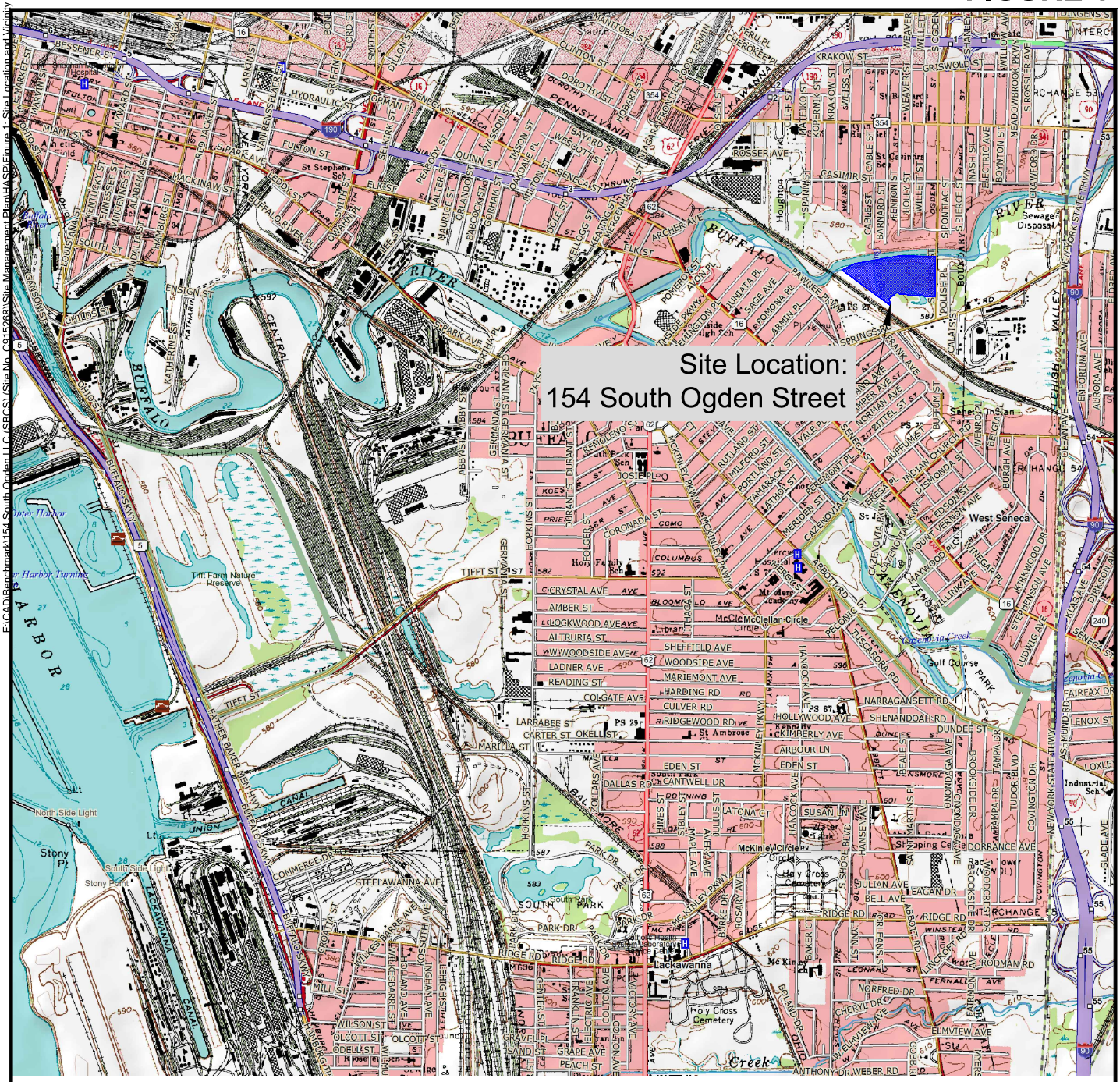
Notes:

1. Respiratory equipment shall conform to guidelines presented in Section 7.0 of this HASP. The Level C requirement is an air-purifying respirator equiped with organic compound/acid gas/dust cartridge.
2. HH = hardhat; L= Latex; L/N = latex inner glove, nitrile outer glove; N = Nitrile; SGSS = safety glasses with sideshields; STSS = steel toe safety shoes.
3. Latex outer boot (or approved overboot) required whenever contact with contaminated materials may occur. SSHO may downgrade to STSS (steel-toed safety shoes) if contact will be limited to cover/replacement soils.
4. Dust masks shall be donned as directed by the SSHO (site safety and health officer) or site safety technician whenever potentially contaminated airborne particulates (i.e., dust) are present in significant amounts in the breathing zone. Goggles may be substituted with safety glasses w/side-shields whenever contact with contaminated liquids is not anticipated.

FIGURES

E:\CAD\Benchmark\154 South Ogden LLC\SEGS\Site No. C915288\Site Management Plan\HASP\Figure 1 Site Location and Vicinity Map.dwg

FIGURE 1



SCALE: 1 INCH = 3000 FEET
SCALE IN FEET
(approximate)

BENCHMARK
ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC

2558 HAMBURG TURNPIKE
SUITE 300
BUFFALO, NY 14218
(716) 856-0599

PROJECT NO.: 0249-012-011

DATE: AUGUST 2014

DRAFTED BY: BCH

SITE LOCATION AND VICINITY MAP

HEALTH AND SAFETY PLAN

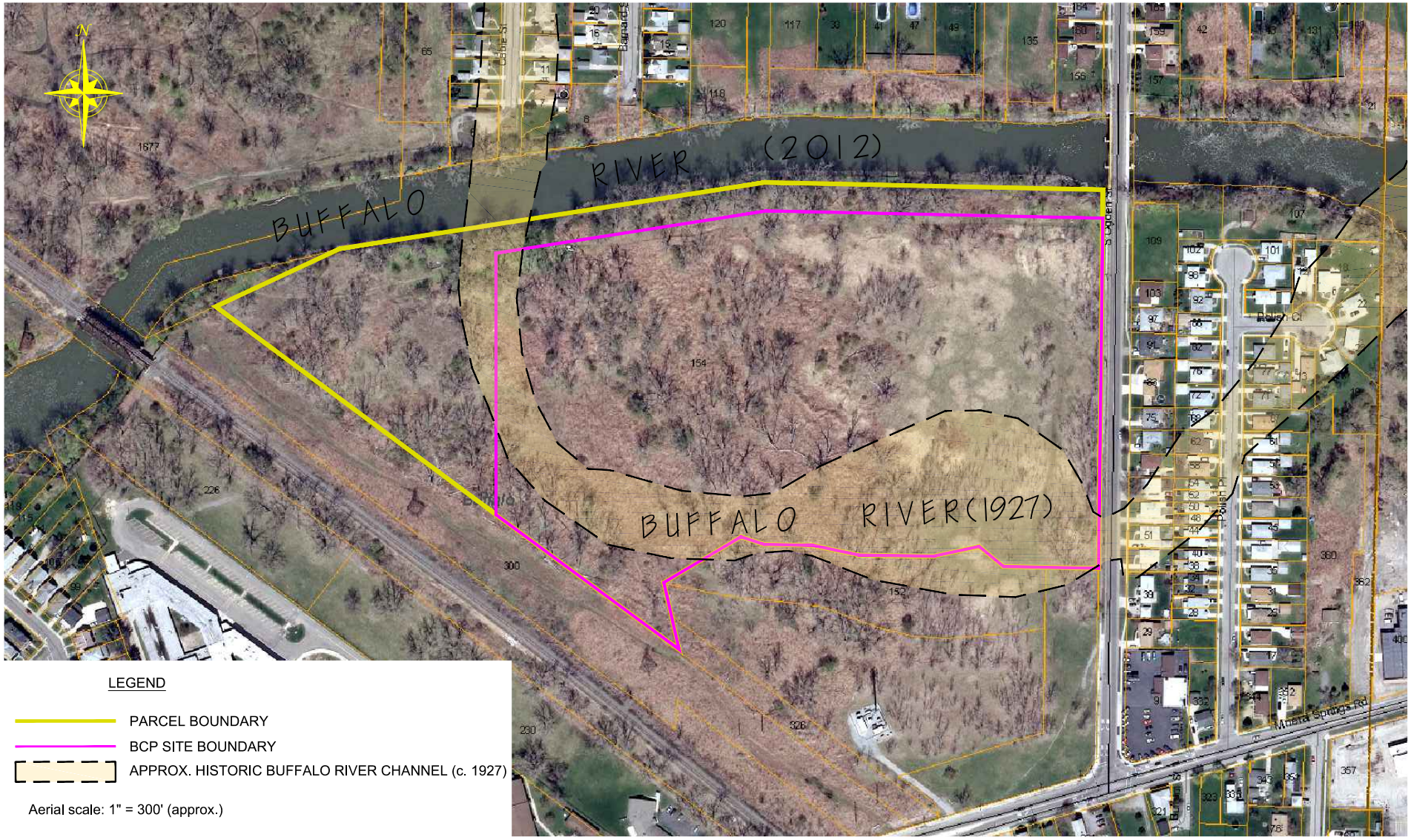
154 SOUTH OGDEN STREET

BUFFALO, NEW YORK

PREPARED FOR

154 SOUTH OGDEN, LLC

F:\CAD\Benchmark\154 South Ogden LLC (SBCS) (Site No. C915268)\Site Management Plan\HASP\Figure 2; Site Plan (Aerial).dwg



BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC

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(716) 856-0599

PROJECT NO.: 0249-012-011

DATE: AUGUST 2014

DRAFTED BY: NTM

SITE PLAN (AERIAL)

HEALTH & SAFETY PLAN

154 SOUTH OGDEN STREET SITE

BUFFALO, NEW YORK

PREPARED FOR

154 SOUTH OGDEN, LLC

FIGURE 2

APPENDIX D-1

EMERGENCY RESPONSE PLAN

EMERGENCY RESPONSE PLAN
for
BROWNFIELD CLEANUP PROGRAM

154 SOUTH OGDEN STREET SITE
BCP SITE NO. C915268
BUFFALO, NEW YORK

August 2014 0249-012-011

Prepared for:

154 SOUTH OGDEN, LLC

Prepared By:

Benchmark Environmental Engineering & Science, PLLC
2558 Hamburg Turnpike, Suite 300
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APPENDIX A: EMERGENCY RESPONSE PLAN

154 South Ogden Street Site

BCP Site No. C915268

TABLE OF CONTENTS

LIST OF FIGURES

1.0 GENERAL

This report presents the site-specific Emergency Response Plan (ERP) referenced in the Site Health and Safety Plan (HASP) prepared for Remedial Investigation (RI) activities at the 154 South Ogden Street Site in Buffalo, New York. This appendix of the HASP describes potential emergencies that may occur at the Site; procedures for responding to those emergencies; roles and responsibilities during emergency response; and training all workers must receive in order to follow emergency procedures. This ERP also describes the provisions this Site has made to coordinate its emergency response planning with other contractors on-site and with off-site emergency response organizations.

This ERP is consistent with the requirements of 29 CFR 1910.120(l) and provides the following site-specific information:

- Pre-emergency planning.
- Personnel roles, lines of authority, and communication.
- Emergency recognition and prevention.
- Safe distances and places of refuge.
- Evacuation routes and procedures.
- Decontamination procedures.
- Emergency medical treatment and first aid.
- Emergency alerting and response procedures.
- Critique of response and follow-up.
- Emergency personal protective equipment (PPE) and equipment.

2.0 PRE-EMERGENCY PLANNING

This Site has been evaluated for potential emergency occurrences, based on site hazards, the required work tasks, the site topography, and prevailing weather conditions. The results of that evaluation indicate the potential for the following site emergencies to occur at the locations indicated.

Type of Emergency:

1. Medical, due to physical injury
2. Fire

Source of Emergency:

1. Slip/trip/fall
2. Fire

Location of Source:

1. Non-specific

3.0 ON-SITE EMERGENCY RESPONSE EQUIPMENT

Emergency procedures may require specialized equipment to facilitate worker rescue, contamination control and reduction, or post-emergency clean up. Emergency response equipment available on the Site is listed below. The equipment inventory and storage locations are based on the potential emergencies described above. This equipment inventory is designed to meet on-site emergency response needs and any specialized equipment needs that off-site responders might require because of the hazards at this Site but not ordinarily stocked.

Any additional personal protective equipment (PPE) required and stocked for emergency response is also listed below. During an emergency, the Emergency Response Coordinator (ERC) is responsible for specifying the level of PPE required for emergency response. At a minimum, PPE used by emergency responders will comply with Section 7.0, Personal Protective Equipment, of this HASP. Emergency response equipment is inspected at regular intervals and maintained in good working order. The equipment inventory is replenished as necessary to maintain response capabilities.

Emergency Equipment	Quantity	Location
First Aid Kit	1	Site Vehicle
Chemical Fire Extinguisher	2 (minimum)	All heavy equipment and Site Vehicle

Emergency PPE	Quantity	Location
Full-face respirator	1 for each worker	Site Vehicle
Chemical-resistant suits	4 (minimum)	Site Vehicle

4.0 EMERGENCY PLANNING MAPS

An area-specific map of the Site will be developed on a daily basis during performance of field activities. The map will be marked to identify critical on-site emergency planning information, including: emergency evacuation routes, a place of refuge, an assembly point, and the locations of key site emergency equipment. Site zone boundaries will be shown to alert responders to known areas of contamination. There are no major topographical features, however the direction of prevailing winds/weather conditions that could affect emergency response planning are also marked on the map. The map will be posted at site-designated place of refuge and inside the Benchmark personnel field vehicle.

5.0 EMERGENCY CONTACTS

The following identifies the emergency contacts for this ERP.

Emergency Telephone Numbers:

Project Manager: ***Bryan C. Hann***
Work: (716) 856-0599
Mobile: (716) 870-1165

Corporate Health and Safety Director: ***Thomas H. Forbes, P.E.***
Work: (716) 856-0599
Mobile: (716) 983-3143

Site Safety and Health Officer (SSHO): ***Bryan C. Hann***
Work: (716) 856-0599
Mobile: (716) 870-1165

Alternate SSHO: ***Richard L. Dubisz***
Work: (716) 856-0635
Mobile: (716) 998-4334

MERCY HOSPITAL of BUFFALO (ER):	(716) 826-7000
FIRE:	911
AMBULANCE:	911
BUFFALO POLICE:	911
STATE EMERGENCY RESPONSE HOTLINE:	(800) 457-7362
NATIONAL RESPONSE HOTLINE:	(800) 424-8802
NYSDOH:	(518) 402-7860
NYSDEC:	(716) 851-7220
NYSDEC 24-HOUR SPILL HOTLINE:	(800) 457-7252

The Site location is:
154 South Ogden Street Site
154 South Ogden Street
Buffalo, New York 14210
Site Phone Number: (Insert Cell Phone or Field Trailer): _____

6.0 EMERGENCY ALERTING & EVACUATION

Internal emergency communication systems are used to alert workers to danger, convey safety information, and maintain site control. Any effective system can be employed. Two-way radio headsets or field telephones are often used when work teams are far from the command post. Hand signals and air-horn blasts are also commonly used. Every system must have a backup. It shall be the responsibility of each contractor's Site Health and Safety Officer to ensure an adequate method of internal communication is understood by all personnel entering the site. Unless all personnel are otherwise informed, the following signals shall be used.

1) Emergency signals by portable air horn, siren, or whistle: two short blasts, personal injury; continuous blast, emergency requiring site excavation.

2) Visual signals: hand gripping throat, out of air/cannot breathe; hands on top of head, need assistance; thumbs up, affirmative/ everything is OK; thumbs down, no/negative; grip partner's wrist or waist, leave area immediately.

If evacuation notice is given, site workers leave the worksite with their respective buddies, if possible, by way of the nearest exit. Emergency decontamination procedures detailed in Section 12.0 of the HASP are followed to the extent practical without compromising the safety and health of site personnel. The evacuation routes and assembly area will be determined by conditions at the time of the evacuation based on wind direction, the location of the hazard source, and other factors as determined by rehearsals and inputs from emergency response organizations. Wind direction indicators are located so that workers can determine a safe up wind or cross wind evacuation route and assembly area if not informed by the emergency response coordinator at the time the evacuation alarm sounds. Since work conditions and work zones within the site may be changing on daily basis, it shall be the responsibility of the construction Site Health and Safety Officer to review evacuation routes and procedures as necessary and to inform all Benchmark-TurnKey workers of any changes.

Personnel exiting the site will gather at a designated assembly point. To determine that everyone has successfully exited the site, personnel will be accounted for at the assembly site. If any worker cannot be accounted for, notification is given to the SSHO (***Bryan Hann*** or ***Richard Dubisz***) so that appropriate action can be initiated. Contractors and subcontractors on this site have coordinated their emergency response plans to ensure that these plans are compatible and that source(s) of potential emergencies are recognized, alarm systems are clearly understood, and evacuation routes are accessible to all personnel relying upon them.

7.0 EXTREME WEATHER CONDITIONS

In the event of adverse weather conditions, the Site Safety and Health Officer in conjunction with the Contractor's SSHO will determine if engineering operations can continue without sacrificing the health and safety of site personnel. Items to be considered prior to determining if work should continue include but are not limited to:

- Potential for heat/cold stress.
- Weather-related construction hazards (e.g., flooding or wet conditions producing undermining of structures or sheeting, high wind threats, etc).
- Limited visibility.
- Potential for electrical storms.
- Limited site access/egress (e.g., due to heavy snow)

8.0 EMERGENCY MEDICAL TREATMENT & FIRST AID

Personnel Exposure:

The following general guidelines will be employed in instances where health impacts threaten to occur or acute exposure is realized:

- Skin Contact: Use copious amounts of soap and water. Wash/rinse affected area for at least 15 minutes. Decontaminate and provide medical attention. Eyewash stations will be provided on site. If necessary, transport to Mercy Hospital.

- Inhalation: Move to fresh air and, if necessary, transport to Mercy Hospital.

- Ingestion: Decontaminate and transport to Mercy Hospital.

Personal Injury:

Minor first-aid will be applied on-site as deemed necessary. In the event of a life threatening injury, the individual should be transported to Mercy Hospital via ambulance. The Site Health and Safety Officer will supply available chemical specific information to appropriate medical personnel as requested.

First aid kits will conform to Red Cross and other applicable good health standards, and shall consist of a weatherproof container with individually sealed packages for each type of item. First aid kits will be fully equipped before being sent out on each job and will be checked weekly by the SSHO to ensure that the expended items are replaced.

Directions to Mercy Hospital (see Figure 1):

The following directions describe the best route from the Site to Mercy Hospital:

- Travel South along South Ogden St. toward Mineral Springs Rd.
- Turn right onto Mineral Springs Rd.
- Turn left onto Seneca St.
- Turn right onto Cazenovia St.
- ER at corner of Abbott Rd. and Cazenovia Street - 565 Abbott Rd.

9.0 EMERGENCY RESPONSE CRITIQUE & RECORD KEEPING

Following an emergency, the SSHO and Project Manager shall review the effectiveness of this Emergency Response Plan (ERP) in addressing notification, control and evacuation requirements. Updates and modifications to this ERP shall be made accordingly. It shall be the responsibility of each contractor to establish and assure adequate records of the following:

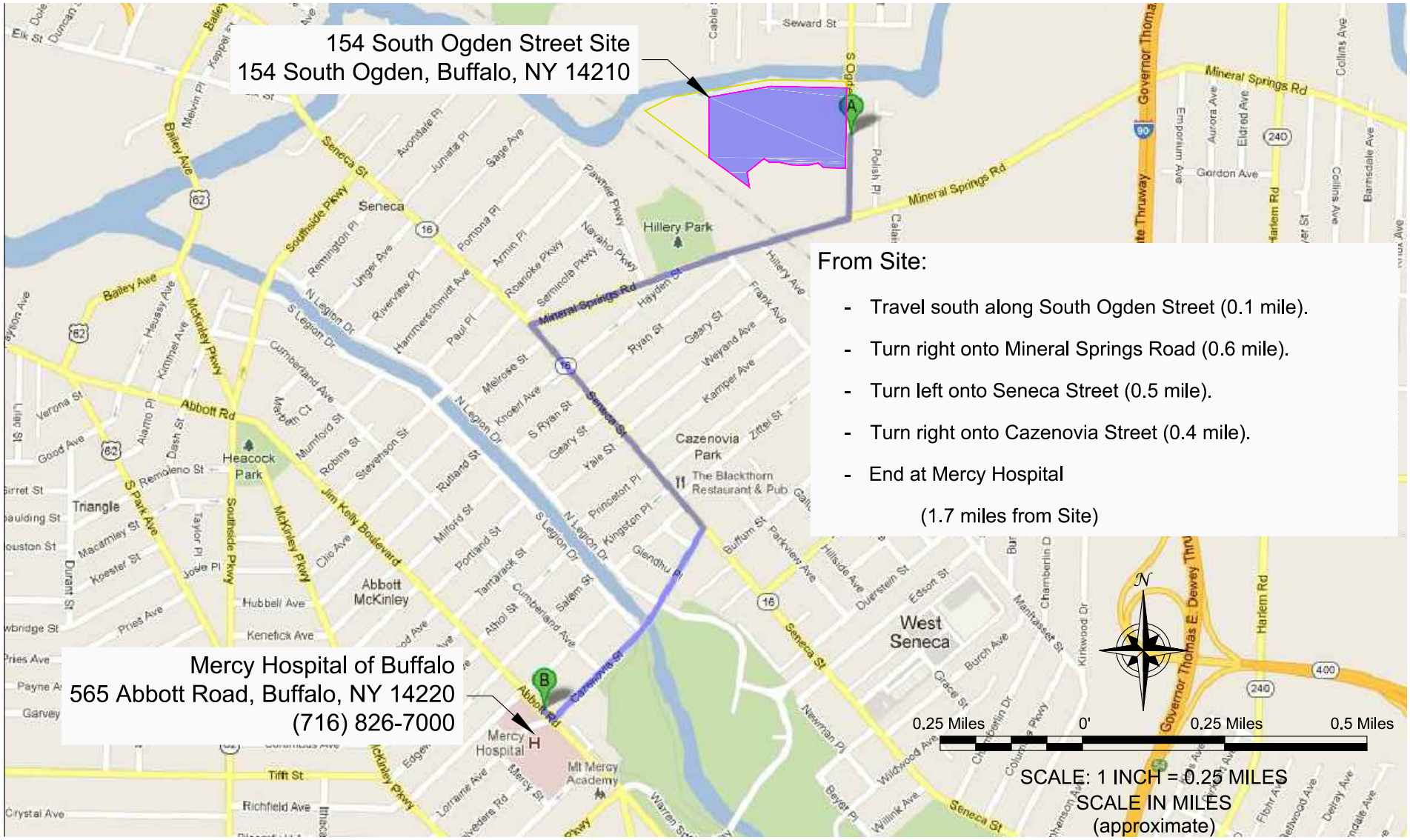
- Occupational injuries and illnesses.
- Accident investigations.
- Reports to insurance carrier or State compensation agencies.
- Reports required by the client.
- Records and reports required by local, state, federal and/or international agencies.
- Property or equipment damage.
- Third party injury or damage claims.
- Environmental testing logs.
- Explosive and hazardous substances inventories and records.
- Records of inspections and citations.
- Safety training.

10.0 EMERGENCY RESPONSE TRAINING

All persons who enter the worksite, including visitors, shall receive a site-specific briefing about anticipated emergency situations and the emergency procedures by the SSHO. Where this site relies on off-site organizations for emergency response, the training of personnel in those off-site organizations has been evaluated and is deemed adequate for response to this site.

FIGURES

F:\CAD\Benchmark\154 South Ogden LLC (SBCS) (Site No. C915268)\Site Management Plan\HASP\ERP\Figure 1; Hospital Route Map.dwg



BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC
2558 HAMBURG TURNPIKE
SUITE 300
BUFFALO, NY 14218
(716) 856-0599

PROJECT NO.: 0249-012-011

DATE: AUGUST 2014

DRAFTED BY: JGT

HOSPITAL ROUTE MAP

EMERGENCY RESPONSE PLAN

154 SOUTH OGDEN STREET SITE

BUFFALO, NEW YORK

PREPARED FOR

154 SOUTH OGDEN, LLC

FIGURE 1

APPENDIX D-2

HOT WORK PERMIT FORM

BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC

HOT WORK PERMIT

PART 1 - INFORMATION

Issue Date:

Date Work to be Performed: Start: | Finish (permit terminated):

Performed By:

Work Area:

Object to be Worked On:

PART 2 - APPROVAL

(for 1, 2 or 3: mark Yes, No or NA)*

Will working be on or in:	Finish (permit terminated):	
1. Metal partition, wall, ceiling covered by combustible material?	yes	no
2. Pipes, in contact with combustible material?	yes	no
3. Explosive area?	yes	no

* = If any of these conditions exist (marked "yes"), a permit will not be issued without being reviewed and approved by Thomas H. Forbes (Corporate Health and Safety Director). Required Signature below.

PART 3 - REQUIRED CONDITIONS**

(Check all conditions that must be met)

	PROTECTIVE ACTION		PROTECTIVE EQUIPMENT
	Specific Risk Assessment Required		Goggles/visor/welding screen
	Fire or spark barrier		Apron/fireproof clothing
	Cover hot surfaces		Welding gloves/gauntlets/other:
	Move movable fire hazards, specifically		Wellintons/Knee pads
	Erect screen on barrier		Ear protection: Ear muffs/Ear plugs
	Restrict Access		B.A.: SCBA/Long Breather
	Wet the ground		Respirator: Type:
	Ensure adequate ventilation		Cartridge:
	Provide adequate supports		Local Exhaust Ventilation
	Cover exposed drain/floor or wall cracks		Extinguisher/Fire blanket
	Fire watch (must remain on duty during duration of permit)		Personal flammable gas monitor
	Issue additional permit(s):		

Other precautions:

** Permit will not be issued until these conditions are met.

SIGNATURES

Orginating Employee:	Date:
Project Manager:	Date:
Part 2 Approval:	Date:

Prepared By: _____

APPENDIX D-3

NYSDOH GENERIC COMMUNITY AIR MONITORING PLAN

Appendix 1A
New York State Department of Health
Generic Community Air Monitoring Plan

Overview

A Community Air Monitoring Plan (CAMP) requires real-time monitoring for volatile organic compounds (VOCs) and particulates (i.e., dust) at the downwind perimeter of each designated work area when certain activities are in progress at contaminated sites. The CAMP is not intended for use in establishing action levels for worker respiratory protection. Rather, its intent is to provide a measure of protection for the downwind community (i.e., off-site receptors including residences and businesses and on-site workers not directly involved with the subject work activities) from potential airborne contaminant releases as a direct result of investigative and remedial work activities. The action levels specified herein require increased monitoring, corrective actions to abate emissions, and/or work shutdown. Additionally, the CAMP helps to confirm that work activities did not spread contamination off-site through the air.

The generic CAMP presented below will be sufficient to cover many, if not most, sites. Specific requirements should be reviewed for each situation in consultation with NYSDOH to ensure proper applicability. In some cases, a separate site-specific CAMP or supplement may be required. Depending upon the nature of contamination, chemical- specific monitoring with appropriately-sensitive methods may be required. Depending upon the proximity of potentially exposed individuals, more stringent monitoring or response levels than those presented below may be required. Special requirements will be necessary for work within 20 feet of potentially exposed individuals or structures and for indoor work with co-located residences or facilities. These requirements should be determined in consultation with NYSDOH.

Reliance on the CAMP should not preclude simple, common-sense measures to keep VOCs, dust, and odors at a minimum around the work areas.

Community Air Monitoring Plan

Depending upon the nature of known or potential contaminants at each site, real-time air monitoring for VOCs and/or particulate levels at the perimeter of the exclusion zone or work area will be necessary. Most sites will involve VOC and particulate monitoring; sites known to be contaminated with heavy metals alone may only require particulate monitoring. If radiological contamination is a concern, additional monitoring requirements may be necessary per consultation with appropriate DEC/NYSDOH staff.

Continuous monitoring will be required for all ground intrusive activities and during the demolition of contaminated or potentially contaminated structures. Ground intrusive activities include, but are not limited to, soil/waste excavation and handling, test pitting or trenching, and the installation of soil borings or monitoring wells.

Periodic monitoring for VOCs will be required during non-intrusive activities such as the collection of soil and sediment samples or the collection of groundwater samples from existing monitoring wells. “Periodic” monitoring during sample collection might reasonably consist of taking a reading upon arrival at a sample location, monitoring while opening a well cap or

overturning soil, monitoring during well baling/purging, and taking a reading prior to leaving a sample location. In some instances, depending upon the proximity of potentially exposed individuals, continuous monitoring may be required during sampling activities. Examples of such situations include groundwater sampling at wells on the curb of a busy urban street, in the midst of a public park, or adjacent to a school or residence.

VOC Monitoring, Response Levels, and Actions

Volatile organic compounds (VOCs) must be monitored at the downwind perimeter of the immediate work area (i.e., the exclusion zone) on a continuous basis or as otherwise specified. Upwind concentrations should be measured at the start of each workday and periodically thereafter to establish background conditions, particularly if wind direction changes. The monitoring work should be performed using equipment appropriate to measure the types of contaminants known or suspected to be present. The equipment should be calibrated at least daily for the contaminant(s) of concern or for an appropriate surrogate. The equipment should be capable of calculating 15-minute running average concentrations, which will be compared to the levels specified below.

1. If the ambient air concentration of total organic vapors at the downwind perimeter of the work area or exclusion zone exceeds 5 parts per million (ppm) above background for the 15-minute average, work activities must be temporarily halted and monitoring continued. If the total organic vapor level readily decreases (per instantaneous readings) below 5 ppm over background, work activities can resume with continued monitoring.

2. If total organic vapor levels at the downwind perimeter of the work area or exclusion zone persist at levels in excess of 5 ppm over background but less than 25 ppm, work activities must be halted, the source of vapors identified, corrective actions taken to abate emissions, and monitoring continued. After these steps, work activities can resume provided that the total organic vapor level 200 feet downwind of the exclusion zone or half the distance to the nearest potential receptor or residential/commercial structure, whichever is less - but in no case less than 20 feet, is below 5 ppm over background for the 15-minute average.

3. If the organic vapor level is above 25 ppm at the perimeter of the work area, activities must be shutdown.

4. All 15-minute readings must be recorded and be available for State (DEC and NYSDOH) personnel to review. Instantaneous readings, if any, used for decision purposes should also be recorded.

Particulate Monitoring, Response Levels, and Actions

Particulate concentrations should be monitored continuously at the upwind and downwind perimeters of the exclusion zone at temporary particulate monitoring stations. The particulate monitoring should be performed using real-time monitoring equipment capable of measuring particulate matter less than 10 micrometers in size (PM-10) and capable of integrating over a period of 15 minutes (or less) for comparison to the airborne particulate action level. The equipment must be equipped with an audible alarm to indicate exceedance of the action level. In addition, fugitive dust migration should be visually assessed during all work activities.

1. If the downwind PM-10 particulate level is 100 micrograms per cubic meter (mcg/m^3) greater than background (upwind perimeter) for the 15-minute period or if airborne dust is observed leaving the work area, then dust suppression techniques must be employed. Work may continue with dust suppression techniques provided that downwind PM-10 particulate levels do not exceed 150 mcg/m^3 above the upwind level and provided that no visible dust is migrating from the work area.

2. If, after implementation of dust suppression techniques, downwind PM-10 particulate levels are greater than 150 mcg/m^3 above the upwind level, work must be stopped and a re-evaluation of activities initiated. Work can resume provided that dust suppression measures and other controls are successful in reducing the downwind PM-10 particulate concentration to within 150 mcg/m^3 of the upwind level and in preventing visible dust migration.

3. All readings must be recorded and be available for State (DEC and NYSDOH) and County Health personnel to review.

December 2009

Appendix 1B
Fugitive Dust and Particulate Monitoring

A program for suppressing fugitive dust and particulate matter monitoring at hazardous waste sites is a responsibility on the remedial party performing the work. These procedures must be incorporated into appropriate intrusive work plans. The following fugitive dust suppression and particulate monitoring program should be employed at sites during construction and other intrusive activities which warrant its use:

1. Reasonable fugitive dust suppression techniques must be employed during all site activities which may generate fugitive dust.

2. Particulate monitoring must be employed during the handling of waste or contaminated soil or when activities on site may generate fugitive dust from exposed waste or contaminated soil. Remedial activities may also include the excavation, grading, or placement of clean fill. These control measures should not be considered necessary for these activities.

3. Particulate monitoring must be performed using real-time particulate monitors and shall monitor particulate matter less than ten microns (PM10) with the following minimum performance standards:

(a) Objects to be measured: Dust, mists or aerosols;
(b) Measurement Ranges: 0.001 to 400 mg/m3 (1 to 400,000 :ug/m3);
(c) Precision (2-sigma) at constant temperature: +/- 10 :g/m3 for one second averaging; and +/- 1.5 g/m3 for sixty second averaging;
(d) Accuracy: +/- 5% of reading +/- precision (Referred to gravimetric calibration with SAE fine test dust (mmd= 2 to 3 :m, g= 2.5, as aerosolized);
(e) Resolution: 0.1% of reading or 1g/m3, whichever is larger;
(f) Particle Size Range of Maximum Response: 0.1-10;
(g) Total Number of Data Points in Memory: 10,000;
(h) Logged Data: Each data point with average concentration, time/date and data point number
(i) Run Summary: overall average, maximum concentrations, time/date of maximum, total number of logged points, start time/date, total elapsed time (run duration), STEL concentration and time/date occurrence, averaging (logging) period, calibration factor, and tag number;
(j) Alarm Averaging Time (user selectable): real-time (1-60 seconds) or STEL (15 minutes), alarms required;
(k) Operating Time: 48 hours (fully charged NiCd battery); continuously with charger;
(l) Operating Temperature: -10 to 50^{o} C (14 to 122^{o} F);
(m) Particulate levels will be monitored upwind and immediately downwind at the working site and integrated over a period not to exceed 15 minutes.

4. In order to ensure the validity of the fugitive dust measurements performed, there must be appropriate Quality Assurance/Quality Control (QA/QC). It is the responsibility of the remedial party to adequately supplement QA/QC Plans to include the following critical features: periodic instrument calibration, operator training, daily instrument performance (span) checks, and a record keeping plan.

5. The action level will be established at 150 ug/m3 (15 minutes average). While conservative,

this short-term interval will provide a real-time assessment of on-site air quality to assure both health and safety. If particulate levels are detected in excess of 150 ug/m3, the upwind background level must be confirmed immediately. If the working site particulate measurement is greater than 100 ug/m3 above the background level, additional dust suppression techniques must be implemented to reduce the generation of fugitive dust and corrective action taken to protect site personnel and reduce the potential for contaminant migration. Corrective measures may include increasing the level of personal protection for on-site personnel and implementing additional dust suppression techniques (see paragraph 7). Should the action level of 150 ug/m3 continue to be exceeded work must stop and DER must be notified as provided in the site design or remedial work plan. The notification shall include a description of the control measures implemented to prevent further exceedances.

6. It must be recognized that the generation of dust from waste or contaminated soil that migrates off-site, has the potential for transporting contaminants off-site. There may be situations when dust is being generated and leaving the site and the monitoring equipment does not measure PM10 at or above the action level. Since this situation has the potential to allow for the migration of contaminants off-site, it is unacceptable. While it is not practical to quantify total suspended particulates on a real-time basis, it is appropriate to rely on visual observation. If dust is observed leaving the working site, additional dust suppression techniques must be employed. Activities that have a high dusting potential--such as solidification and treatment involving materials like kiln dust and lime--will require the need for special measures to be considered.

7. The following techniques have been shown to be effective for the controlling of the generation and migration of dust during construction activities:

(a) Applying water on haul roads;
(b) Wetting equipment and excavation faces;
(c) Spraying water on buckets during excavation and dumping;
(d) Hauling materials in properly tarped or watertight containers;
(e) Restricting vehicle speeds to 10 mph;
(f) Covering excavated areas and material after excavation activity ceases; and
(g) Reducing the excavation size and/or number of excavations.

Experience has shown that the chance of exceeding the 150ug/m3 action level is remote when the above-mentioned techniques are used. When techniques involving water application are used, care must be taken not to use excess water, which can result in unacceptably wet conditions. Using atomizing sprays will prevent overly wet conditions, conserve water, and provide an effective means of suppressing the fugitive dust.

8. The evaluation of weather conditions is necessary for proper fugitive dust control. When extreme wind conditions make dust control ineffective, as a last resort remedial actions may need to be suspended. There may be situations that require fugitive dust suppression and particulate monitoring requirements with action levels more stringent than those provided above. Under some circumstances, the contaminant concentration and/or toxicity may require additional monitoring to protect site personnel and the public. Additional integrated sampling and chemical analysis of the dust may also be in order. This must be evaluated when a health and safety plan is developed and when appropriate suppression and monitoring requirements are established for protection of health and the environment.

APPENDIX E

SITE-WIDE INSPECTION FORM

BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC

Field Inspection Report
Post-Remedial Operation & Maintenance Plan

Property Name:		Project No.:	
Client:			
Property Address:			
Property ID: (Tax Assessment Map)	Section:	Block:	Lot(s):
Preparer's		Date/Time:	

CERTIFICATION

The results of this inspection were discussed with the Site Manager. Any corrective actions required have been identified and noted in this report, and a supplemental Corrective Action Form has been completed. Proper implementation of these corrective actions have been discussed with the Site Manager, agreed upon, and scheduled.

Preparer / Inspector:	**Date:**
Signature:	
Next Scheduled Inspection Date:	

Property Access

1. Is the access road in need of repair?	☐ yes	☐ no	☐ N/A
2. Sufficient signage posted (No Trespassing)?	☐ yes	☐ no	☐ N/A
3. Has there been any noted or reported trespassing?	☐ yes	☐ no	☐ N/A

Please note any irregularities/ changes in site access and security: _____

Final Surface Cover / Vegetation

The integrity of the vegetative soil cover or other surface coverage (e.g., asphalt, concrete) over the entire Site must be maintained. The following documents the condition of the above.

1. Final Cover is in Place and in good condition?	☐ yes	☐ no	☐ N/A
Cover consists of (mainly): _____			
2. Evidence of erosion?	☐ yes	☐ no	☐ N/A
3. Cracks visible in pavement?	☐ yes	☐ no	☐ N/A
4. Evidence of distressed vegetation/turf?	☐ yes	☐ no	☐ N/A
5. Evidence of unintended traffic and/or rutting?	☐ yes	☐ no	☐ N/A
6. Evidence of uneven settlement and/or ponding?	☐ yes	☐ no	☐ N/A

Field Inspection Report
Post-Remedial Operation & Maintenance Plan

Final Surface Cover / Vegetation (continued)

7. Damage to any surface coverage? ☐ yes ☐ no ☐ N/A

If yes to any question above, please provide more information below.

Bioretention Basin Monitoring and Maintenance

Are there signs of stressed vegetation within the basin? ☐ yes ☐ no ☐ N/A

If yes, which basin: #1 #2 #3 #4 #5

Are the basins currently intact and operational? ☐ yes ☐ no ☐ N/A

If no, which basin: #1 #2 #3 #4 #5

Has regular maintenance and monitoring been documented and enclosed or referenced?

☐ yes ☐ no ☐ N/A

Groundwater Monitoring

Is there a plan in place and currently being followed? ☐ yes ☑ no ☐ N/A

Are the wells currently intact and operational? ☐ yes ☐ no ☑ N/A

N/A

When was the most recent sampling event report and submittal? Date: ___

When is the next projected sampling event? Date: ___

Property Use Changes / Site Development

Has the property usage changed, or site been redeveloped since the last inspection?

☐ yes ☐ no ☐ N/A

If yes, please list with date: ___

BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC

Field Inspection Report
Post-Remedial Operation & Maintenance Plan

New Information

Has any new information been brought to the owner/engineer's attention regarding any and/or all engineering and institutional controls and their operation and effectiveness?

☐ yes ☐ no ☐ N/A

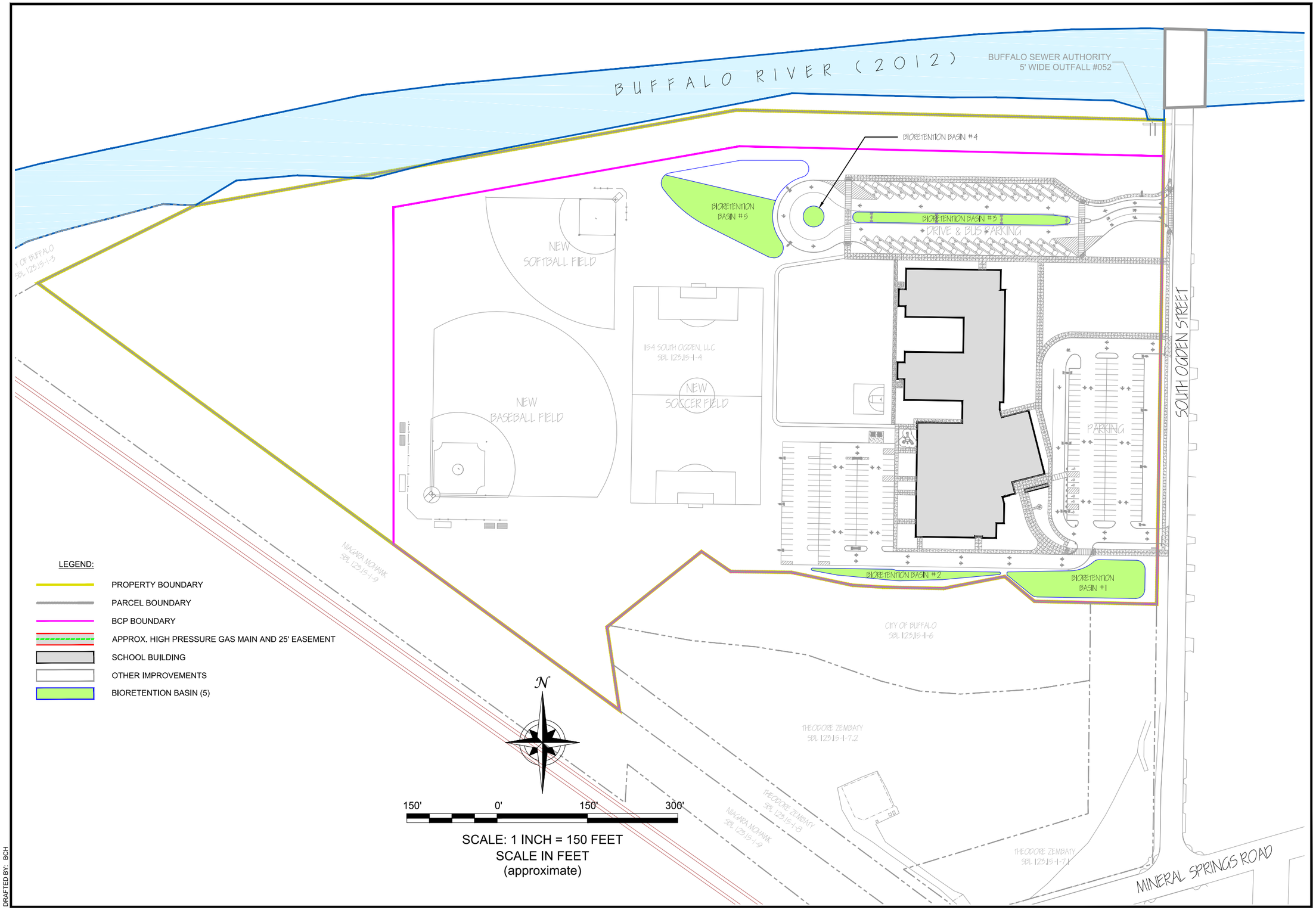
Comments: _____

This space for Notes and Comments

Please include the following Attachments:

1. Site Sketch
2. Photographs

F:\CAD\Benchmark\154 South Ogden LLC (SBCS) (Site No. C915268)\Site Management Plan\HASP\ERP\Figure 1; Site Plan.dwg



DATE: AUGUST 2014
DRAFTED BY: BCH

BENCHMARK
ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC
2558 HAMBURG TURNPIKE
SUITE 300
BUFFALO, NY 14218
(716) 856-0599

JOB NO.: 0249-012-011

SITE PLAN

FIELD INSPECTION REPORT
154 SOUTH OGDEN STREET SITE
BUFFALO, NEW YORK
PREPARED FOR
154 SOUTH OGDEN, LLC

FIGURE 1

APPENDIX F

ELECTRONIC COPY OF SMP