New York State Department of Environmental Conservation

Division of Environmental Remediation

Remedial Bureau E, 12th Floor

625 Broadway, Albany, New York 12233-7017 **Phone:** (518) 402-9814 • **Fax:** (518) 402-9819

Website: www.dec.ny.gov



April 3, 2014

Mr. William Paladino 4216 Group, LLC 295 Main Street, Suite 210 Buffalo, New York 14202

RE: 300 Ohio Street, Site No. C915257

City of Buffalo, Erie County

Remedial Work Plan & Decision Document

Dear Mr. Paladino:

The New York State Department of Environmental Conservation (Department) and the New York State Department of Health (NYSDOH) reviewed the Remedial Work Plan (RWP) for the 300 Ohio Street site that was included in the Remedial Investigation /Alternatives Analysis Report dated November 2013 and prepared by TurnKey Environmental Restoration, LLC, on behalf of the 4216 Group, LLC. The RWP is hereby approved. Please ensure that a copy of the approved RWP/AAR is placed in the document repository. The draft plan should be removed.

Enclosed is a copy of the Department's Decision Document for the site. The remedy is to be implemented in accordance with this Decision Document. Please ensure that a copy of the Decision Document is placed in the document repository.

In accordance with the Brownfield Cleanup Agreement a Remedial Action Work Plan is required and shall be submitted within 30 days of this letter. Please contact the Department's Project Manager, Anthony L. Lopes, at 716-851-7220 or allopes@gw.dec.state.ny.us at your earliest convenience to discuss next steps.

Sincerely,

Michael J. Cruden, PE

Milfel

Director, Remedial Bureau E

Division of Environmental Remediation

Enclosure

ec: w/Enc. R. Schick, DEC

M. Ryan, DEC

M. Doster, DEC Region 9

A. Lopes, DEC, Region 9

D. Ripstein, DOH

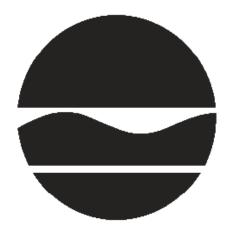
S. Messier-McLaughlin

M. Lesakowski, TurnKey

C. Slater, The Slater Law Firm

DECISION DOCUMENT

300 Ohio Street Site Brownfield Cleanup Program Buffalo, Erie County Site No. C915257 March 2014



Prepared by
Division of Environmental Remediation
New York State Department of Environmental Conservation

DECLARATION STATEMENT - DECISION DOCUMENT

300 Ohio Street Site Brownfield Cleanup Program Buffalo, Erie County Site No. C915257 March 2014

Statement of Purpose and Basis

This document presents the remedy for the 300 Ohio Street Site, a brownfield cleanup site. The remedial program was chosen in accordance with the New York State Environmental Conservation Law and Title 6 of the Official Compilation of Codes, Rules and Regulations of the State of New York (6 NYCRR) Part 375.

This decision is based on the Administrative Record of the New York State Department of Environmental Conservation (the Department) for the 300 Ohio Street Site and the public's input to the proposed remedy presented by the Department.

Description of Selected Remedy

The elements of the selected remedy are as follows:

1. Remedial Design

A remedial design program will be implemented to provide the details necessary for the construction, operation, optimization, maintenance, and monitoring of the remedial program. Green remediation principles and techniques will be implemented to the extent feasible in the design, implementation, and site management of the remedy as per DER-31. The major green remediation components are as follows:

- Considering the environmental impacts of treatment technologies and remedy stewardship over the long term;
- Reducing direct and indirect greenhouse gases and other emissions;
- Increasing energy efficiency and minimizing use of non-renewable energy;
- Conserving and efficiently managing resources and materials;
- Reducing waste, increasing recycling and increasing reuse of materials which would otherwise be considered a waste;
- Maximizing habitat value and creating habitat when possible;
- Fostering green and healthy communities and working landscapes which balance ecological, economic and social goals; and
- Integrating the remedy with the end use where possible and encouraging green and sustainable re-development.

2. Excavation

Excavation and off-site disposal of contaminant source areas of concern (Figure 5) including:

- grossly contaminated soil, as defined in 6 NYCRR Part 375-1.2(u);
- contaminated soil in locations denoted as SS-10, TP-13 and MW-1 will be excavated to attain Total PAH value of 500 ppm, Lead of 1000 ppm, and Arsenic of 16 ppm;
- soils that create a nuisance condition, as defined in Commissioner Policy CP-51 Section G:
- underground storage tanks (Figure 3) including petroleum impacted soils, vent/fill lines, pumps and infrastructure, materials from the demolition of existing structures; and
- once demolition is complete, further investigation is required to refine the nature and extent of contamination in areas where access was previously hindered (e.g. under Buildings 1, 2, and 3).

Approximately 12,670 cubic yards of soil will be removed from the site for disposal at an off-site permitted facility. All excavations will include confirmation sampling. Clean fill meeting the requirements of 6 NYCRR Part 375-6.7(d) will be brought in to replace the excavated soil or complete the backfilling of excavations and establish the designed grades at the site below the cover system described in paragraph 3 below.

3. Cover System

A site cover will be required to allow for commercial use of the site. The cover will consist either of the structures, such as buildings, pavement, and sidewalks comprising the site development, or a soil cover in areas where the upper one foot of exposed surface soil will exceed the applicable soil cleanup objectives (SCOs). Where the soil cover is required, it will be a minimum of one foot of soil meeting the SCOs for cover material as set forth in 6 NYCRR Part 375-6.7(d) for commercial use. The soil cover will be placed over a demarcation layer. Any fill material brought to the site will meet the requirements for the identified site use as set forth in 6 NYCRR Part 375-6.7(d).

4. Institutional Control

Imposition of an institutional control in the form of an environmental easement for the controlled property that:

- requires the remedial party or site owner to complete and submit to the Department a periodic certification of institutional and engineering controls in accordance with Part 375-1.8 (h)(3);
- allows the use and development of the controlled property for commercial and industrial use as defined by Part 375-1.8(g), although land use is subject to local zoning laws;
- restricts the use of groundwater as a source of potable or process water, without necessary water quality treatment as determined by the NYSDOH or County DOH; and
- requires compliance with the Department approved Site Management Plan.

5. Site Management Plan

A Site Management Plan is required, which includes the following:

- a. An Institutional and Engineering Control Plan that identifies all use restrictions and engineering controls for the site and details the steps and media-specific requirements necessary to ensure the following institutional and/or engineering controls remain in place and effective:
- Institutional Controls: The Environmental Easement discussed in Paragraph 4 above; and
- Engineering Controls: The soil cover discussed in Paragraph 3 above.

This plan includes, but may not be limited to:

- an Excavation Plan which details the provisions for management of future excavations in areas of remaining contamination;
- descriptions of the provisions of the environmental easement including any land use, and groundwater use restrictions;
- a provision for evaluation of the potential for soil vapor intrusion should any of the onsite building(s) become occupied and for any buildings developed on the site, including provision for implementing actions recommended to address exposures related to soil vapor intrusion:
- provisions for the management and inspection of the identified engineering controls;
- maintaining site access controls and Department notification; and
- the steps necessary for the periodic reviews and certification of the institutional and/or engineering controls.
- b. A Monitoring Plan to assess the performance and effectiveness of the remedy. The plan includes, but may not be limited to:
- monitoring of groundwater to assess the performance and effectiveness of the remedy;
- a schedule of monitoring and frequency of submittals to the Department; and
- monitoring for vapor intrusion for any buildings re-occupied or developed on the site, as may be required by the Institutional and Engineering Control Plan discussed above.

Declaration

The remedy conforms with promulgated standards and criteria that are directly applicable, or that are relevant and appropriate and takes into consideration Department guidance, as appropriate. The remedy is protective of public health and the environment.

DECISION DOCUMENT

300 Ohio Street Site Buffalo, Erie County Site No. C915257 March 2014

SECTION 1: SUMMARY AND PURPOSE

The New York State Department of Environmental Conservation (the Department), in consultation with the New York State Department of Health (NYSDOH), has selected a remedy for the above referenced site. The disposal of contaminants at the site has resulted in threats to public health and the environment that would be addressed by the remedy. The disposal or release of contaminants at this site, as more fully described in this document, has contaminated various environmental media. Contaminants include hazardous waste and/or petroleum.

The New York State Brownfield Cleanup Program (BCP) is a voluntary program. The goal of the BCP is to enhance private-sector cleanups of brownfields and to reduce development pressure on "greenfields." A brownfield site is real property, the redevelopment or reuse of which may be complicated by the presence or potential presence of a contaminant.

The Department has issued this document in accordance with the requirements of New York State Environmental Conservation Law and 6 NYCRR Part 375. This document is a summary of the information that can be found in the site-related reports and documents.

SECTION 2: CITIZEN PARTICIPATION

The Department seeks input from the community on all remedies. A public comment period was held, during which the public was encouraged to submit comment on the proposed remedy. All comments on the remedy received during the comment period were considered by the Department in selecting a remedy for the site. Site-related reports and documents were made available for review by the public at the following document repositories:

Buffalo and Erie County Public Library Attn: Mary Jean Jakubowski 1 Lafayette Square Buffalo, NY 14203 Phone: 716-858-8900

NYSDEC Attn: Anthony Lopes, P.E. 270 Michigan Ave Buffalo, NY 14203 Phone: 716-851-7220

Receive Site Citizen Participation Information By Email

Please note that the Department's Division of Environmental Remediation (DER) is "going paperless" relative to citizen participation information. The ultimate goal is to distribute citizen participation information about contaminated sites electronically by way of county email listservs. Information will be distributed for all sites that are being investigated and cleaned up in a particular county under the State Superfund Program, Environmental Restoration Program, Brownfield Cleanup Program, Voluntary Cleanup Program, and Resource Conservation and Recovery Act Program. We encourage the public to sign up for one or more county listservs at http://www.dec.ny.gov/chemical/61092.html

SECTION 3: SITE DESCRIPTION AND HISTORY

Location: The 300 Ohio Street site is located in an urban/industrial area and consists of eleven (11) adjoining tax parcels at the corner of Ohio Street and Chicago Street in the City of Buffalo. The Buffalo River is to the west across Chicago Street, and the City of Buffalo Conway Park is to the east.

Site Features: The main site features include an inactive truck terminal, restaurant/office building, five pump islands with product dispensers, and three (3) abandoned buildings. A majority of the site is paved. Grass covered areas are present in the northwest quadrant of the site.

Current Zoning and Land Use: The site is currently inactive, and is zoned for commercial use. The surrounding parcels are currently used for a combination of commercial, industrial, residential, railroad right-of-way, vacant parcels, and parkland. The nearest residential development is less than 0.2 miles to the east and southwest, and less than 0.4 miles to the north.

Past Use of the Site: Until the late 1990s a portion of the site were used as an auto/truck gas and service station, dating back to 1925. The two buildings on the northern portion of the site along Chicago and Mackinaw Street (E&B Machinery and Central Manufacturing) operated as a machine shop, trucking terminal and coffin and cooperage manufacturing operations.

Prior uses that appear to have led to site contamination are associated with the gas and service station operations, including the use of up to fifteen (15) underground storage tanks (USTs), one above ground storage tank (AST), and the use of solvents and oils during auto/truck repair activities. A 2010 Limited Phase II Site Assessment revealed evidence of significant subsurface petroleum contamination related to the former operation of a petroleum filling station and fuel distribution operation. Multiple NYSDEC Spill files have been associated with the site. Municipal records indicate UST replacements due to leaking tanks. Petroleum Bulk Storage (PBS) records indicate that two 20,000 gallon No. 2 fuel oil USTs were closed in place on-site. In November 2011 the site entered the Brownfield Cleanup Program and a remedial investigation commenced.

Site Geology and Hydrogeology: The site is overlain by 8 feet of fill (sand, gravel, asphalt, brick), underlain by silty sandy clay grading into a brown silty clay unit. Shallow groundwater is at 4-6 feet below ground surface (fbgs) and flows west towards the Buffalo River.

A site location map is attached as Figure 1.

SECTION 4: LAND USE AND PHYSICAL SETTING

The Department may consider the current, intended, and reasonably anticipated future land use of the site and its surroundings when evaluating a remedy for soil remediation. For this site, an alternative that restricts the use of the site to commercial use (which allows for industrial use) as described in Part 375-1.8(g) was evaluated in addition to an alternative which would allow for unrestricted use of the site.

A comparison of the results of the Remedial Investigation (RI) to the appropriate standards, criteria and guidance values (SCGs) for the identified land use and the unrestricted use SCGs for the site contaminants is available in the RI Report.

SECTION 5: ENFORCEMENT STATUS

The Applicant under the Brownfield Cleanup Agreement is a Volunteer. The Applicant does not have an obligation to address off-site contamination. However, the Department has determined that this site does not pose a significant threat to public health or the environment; accordingly, no enforcement actions are necessary.

SECTION 6: SITE CONTAMINATION

6.1: Summary of the Remedial Investigation

A remedial investigation (RI) serves as the mechanism for collecting data to:

- characterize site conditions;
- determine the nature of the contamination: and
- assess risk to human health and the environment.

The RI is intended to identify the nature (or type) of contamination which may be present at a site and the extent of that contamination in the environment on the site, or leaving the site. The RI reports on data gathered to determine if the soil, groundwater, soil vapor, indoor air, surface water or sediments may have been contaminated. Monitoring wells are installed to assess groundwater and soil borings or test pits are installed to sample soil and/or waste(s) identified. If other natural resources are present, such as surface water bodies or wetlands, the water and sediment may be sampled as well. Based on the presence of contaminants in soil and groundwater, soil vapor will also be sampled for the presence of contamination. Data collected in the RI influence the development of remedial alternatives. The RI report is available for review in the site document repository and the results are summarized in section 6.3.

The analytical data collected on this site includes data for:

- groundwater
- soil

6.1.1: Standards, Criteria, and Guidance (SCGs)

The remedy must conform to promulgated standards and criteria that are directly applicable or that are relevant and appropriate. The selection of a remedy must also take into consideration guidance, as appropriate. Standards, Criteria and Guidance are hereafter called SCGs.

To determine whether the contaminants identified in various media are present at levels of concern, the data from the RI were compared to media-specific SCGs. The Department has developed SCGs for groundwater, surface water, sediments, and soil. The NYSDOH has developed SCGs for drinking water and soil vapor intrusion. For a full listing of all SCGs see: http://www.dec.ny.gov/regulations/61794.html

6.1.2: RI Results

The data have identified contaminants of concern. A "contaminant of concern" is a contaminant that is sufficiently present in frequency and concentration in the environment to require evaluation for remedial action. Not all contaminants identified on the property are contaminants of concern. The nature and extent of contamination and environmental media requiring action are summarized below. Additionally, the RI Report contains a full discussion of the data. The contaminant(s) of concern identified at this site is/are:

arsenic benzo(b)fluoranthene

cadmiumpyreneleadchrysenebenzo(a)pyrenebenzene

The contaminant(s) of concern exceed the applicable SCGs for:

- groundwater
- soil

6.2: Interim Remedial Measures

An interim remedial measure (IRM) is conducted at a site when a source of contamination or exposure pathway can be effectively addressed before issuance of the Decision Document.

There were no IRMs performed at this site during the RI.

6.3: Summary of Environmental Assessment

This section summarizes the assessment of existing and potential future environmental impacts presented by the site. Environmental impacts may include existing and potential future exposure pathways to fish and wildlife receptors, wetlands, groundwater resources, and surface water. The RI report presents a detailed discussion of any existing and potential impacts from the site to fish and wildlife receptors.

Nature and Extent of Contamination:

Based upon investigations conducted to date, the primary contaminants of concern are arsenic, cadmium, lead, several polyaromatic hydrocarbons (PAHs), and grossly contaminated media (GCM). GCM means soil or groundwater which contains sources or substantial quantities of mobile contamination in the form of non-aqueous phase liquid (NAPL), as defined in subdivision 375-1.2(ac), that is identifiable either visually, through strong odor, by elevated contaminant vapor levels or is otherwise readily detectable without laboratory analysis.

Soil - GCM was identified during the RI based on visual, olfactory, and/or photo ionization detector (PID) readings. Contamination was identified in the central area of the site surrounding the current and former USTs, associated piping, and product dispensers, ranging from 0 to 14 feet below ground surface (fbgs), with the greatest impacts noted 6-8 fbgs. Soil contaminated with lead (maximum value 11,000 ppm) was limited to an area around sample location SS-10. Arsenic was found across the site with a maximum value of 87 ppm located near sample location SS-10, and 39 ppm near sample location TP-13. Cadmium is found across the site in values ranging up to 15 ppm. Total PAHs are also found across the site in soils ranging up to 17,030 ppm, typically associated with GCM. A value of 3,850 ppm (total PAHs) was also found near sample location MW-1. Available data show no indication of offsite impacts.

Groundwater - Benzene was detected above its groundwater quality standard (GWQS) in MW-2, MW-3, and MW-5; however, benzene only slightly exceeded its GWQS in MW-2 and MW-5 (1.1 ppb and 2.3 ppb, respectively). Dissolved metals detected above GWQS are primarily naturally occurring minerals. Four (4) SVOCs were detected above their respective GWQS in MW-4; however, detections of these SVOC compounds are reasonably attributable to high turbidity in groundwater samples. No PCBs, pesticides, and/or herbicides were detected above the laboratory detection limit. Based on available data there is no evidence of contaminant migration off-site.

Soil Vapor and Indoor Air - Sampling was not conducted since the buildings are not occupied and site is vacant.

6.4: Summary of Human Exposure Pathways

This human exposure assessment identifies ways in which people may be exposed to site-related contaminants. Chemicals can enter the body through three major pathways (breathing, touching or swallowing). This is referred to as exposure.

The site is partially fenced and persons who enter the site could contact contaminants in the soil by walking on the soil in unpaved areas, or by digging or otherwise disturbing the soil. Contaminated groundwater at the site is not used for drinking or other purposes and the site is served by a public water supply that obtains water from a different source not affected by this contamination. Volatile organic compounds in the groundwater may move into the soil vapor (air spaces within the soil), which in turn may move into overlying buildings and affect the indoor air quality. This process, which is similar to the movement of radon gas from the subsurface into the indoor air of buildings, is referred to as soil vapor intrusion. The potential exists for the inhalation of site contaminants due to soil vapor intrusion for any future on-site redevelopment and occupancy. Environmental sampling indicates soil vapor intrusion is not a concern for off-site buildings.

6.5: Summary of the Remediation Objectives

The objectives for the remedial program have been established through the remedy selection process stated in 6 NYCRR Part 375. The goal for the remedial program is to restore the site to pre-disposal conditions to the extent feasible. At a minimum, the remedy shall eliminate or mitigate all significant threats to public health and the environment presented by the contamination identified at the site through the proper application of scientific and engineering principles.

The remedial action objectives for this site are:

Groundwater

RAOs for Public Health Protection

• Prevent ingestion of groundwater with contaminant levels exceeding drinking water standards.

RAOs for Environmental Protection

• Remove the source of ground or surface water contamination.

Soil

RAOs for Public Health Protection

• Prevent ingestion/direct contact with contaminated soil.

RAOs for Environmental Protection

• Prevent migration of contaminants that would result in groundwater or surface water contamination.

Soil Vapor

RAOs for Public Health Protection

• Mitigate impacts to public health resulting from existing, or the potential for, soil vapor intrusion into buildings at a site.

SECTION 7: ELEMENTS OF THE SELECTED REMEDY

The alternatives developed for the site and the evaluation of the remedial criteria are presented in the Alternative Analysis. The remedy is selected pursuant to the remedy selection criteria set forth in DER-10, Technical Guidance for Site Investigation and Remediation and 6 NYCRR Part 375.

The selected remedy is referred to as the Commercial Use Track 4 Cleanup remedy.

The elements of the selected remedy, as shown in Figure 5, are as follows:

1. Remedial Design

A remedial design program will be implemented to provide the details necessary for the construction, operation, optimization, maintenance, and monitoring of the remedial program. Green remediation principles and techniques will be implemented to the extent feasible in the design, implementation, and site management of the remedy as per DER-31. The major green remediation components are as follows:

- Considering the environmental impacts of treatment technologies and remedy stewardship over the long term;
- Reducing direct and indirect greenhouse gases and other emissions;
- Increasing energy efficiency and minimizing use of non-renewable energy;
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- Reducing waste, increasing recycling and increasing reuse of materials which would otherwise be considered a waste;
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- Integrating the remedy with the end use where possible and encouraging green and sustainable re-development.

2. Excavation

Excavation and off-site disposal of contaminant source areas of concern (Figure 5) including:

- grossly contaminated soil, as defined in 6 NYCRR Part 375-1.2(u);
- contaminated soil in locations denoted as SS-10, TP-13 and MW-1 will be excavated to attain Total PAH value of 500 ppm, Lead of 1000 ppm, and Arsenic of 16 ppm;
- soils that create a nuisance condition, as defined in Commissioner Policy CP-51 Section G:
- underground storage tanks (Figure 3) including petroleum impacted soils, vent/fill lines, pumps and infrastructure, materials from the demolition of existing structures; and
- once demolition is complete, further investigation is required to refine the nature and extent of contamination in areas where access was previously hindered (e.g. under Buildings 1, 2, and 3).

Approximately 12,670 cubic yards of soil will be removed from the site for disposal at an off-site permitted facility. All excavations will include confirmation sampling. Clean fill meeting the requirements of 6 NYCRR Part 375-6.7(d) will be brought in to replace the excavated soil or complete the backfilling of excavations and establish the designed grades at the site below the cover system described in paragraph 3 below.

3. Cover System

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4. Institutional Control

Imposition of an institutional control in the form of an environmental easement for the controlled property that:

- requires the remedial party or site owner to complete and submit to the Department a periodic certification of institutional and engineering controls in accordance with Part 375-1.8 (h)(3);
- allows the use and development of the controlled property for commercial and industrial use as defined by Part 375-1.8(g), although land use is subject to local zoning laws;
- restricts the use of groundwater as a source of potable or process water, without necessary water quality treatment as determined by the NYSDOH or County DOH; and
- requires compliance with the Department approved Site Management Plan.

5. Site Management Plan

A Site Management Plan is required, which includes the following:

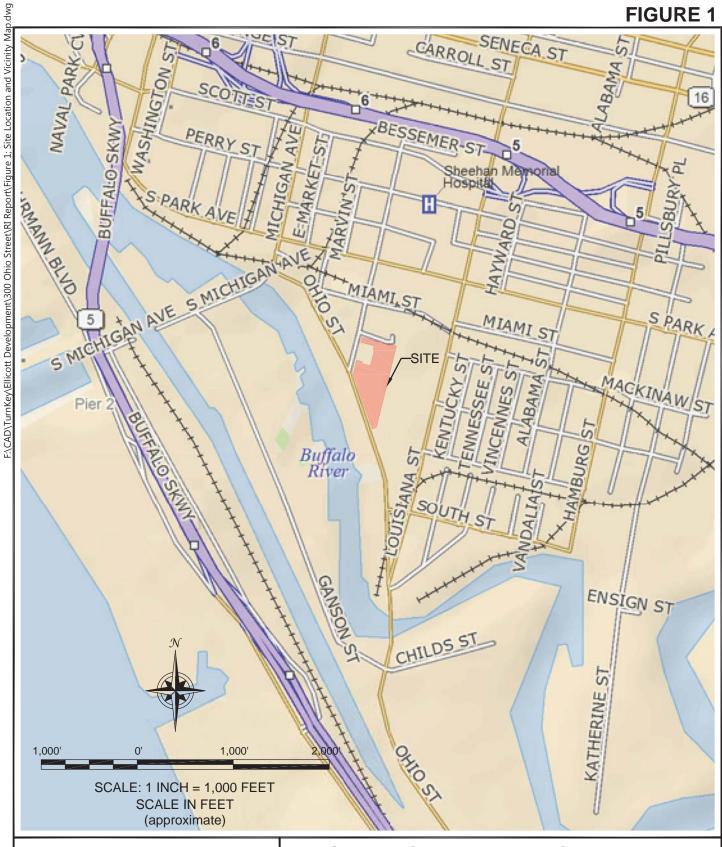
- a. An Institutional and Engineering Control Plan that identifies all use restrictions and engineering controls for the site and details the steps and media-specific requirements necessary to ensure the following institutional and/or engineering controls remain in place and effective:
- Institutional Controls: The Environmental Easement discussed in Paragraph 4 above; and
- Engineering Controls: The soil cover discussed in Paragraph 3 above.

This plan includes, but may not be limited to:

- an Excavation Plan which details the provisions for management of future excavations in areas of remaining contamination;
- descriptions of the provisions of the environmental easement including any land use, and groundwater use restrictions;
- a provision for evaluation of the potential for soil vapor intrusion should any of the onsite building(s) become occupied and for any buildings developed on the site, including provision for implementing actions recommended to address exposures related to soil vapor intrusion;
- provisions for the management and inspection of the identified engineering controls;
- maintaining site access controls and Department notification; and
- the steps necessary for the periodic reviews and certification of the institutional and/or engineering controls.

- b. A Monitoring Plan to assess the performance and effectiveness of the remedy. The plan includes, but may not be limited to:
- monitoring of groundwater to assess the performance and effectiveness of the remedy;
- a schedule of monitoring and frequency of submittals to the Department; and
- monitoring for vapor intrusion for any buildings re-occupied or developed on the site, as may be required by the Institutional and Engineering Control Plan discussed above.

FIGURE 1





2558 HAMBURG TURNPIKE SUITE 300 BUFFALO, NY 14218 (716) 856-0635

PROJECT NO.: 0136-037-102

DATE: FEBRUARY 2013 DRAFTED BY: JGT

SITE LOCATION AND VICINITY MAP

RI/AA REPORT 300 OHIO STREET SITE

BUFFALO, NEW YORK PREPARED FOR 4216 GROUP, LLC



SITE PLAN (AERIAL)

RI/AA REPORT 300 OHIO STREET SITE

BUFFALO, NEW YORK PREPARED FOR 4216 GROUP, LLC

JOB NO.: 0136-037-102

FIGURE 2

