NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Division of Environmental Remediation, Remedial Bureau E
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www.dec.ny.gov

December 28, 2015

Mr. Faisal Merani
Merani Hospitality Inc.
7001 Buffalo Avenue
Niagara Falls, New York 14304

RE: 401, 402 & 430 Buffalo Avenue, Site No. C932164
Niagara Falls, Niagara County - Decision Document

Dear Mr. Merani:

The New York State Department of Environmental Conservation (NYSDEC) in cooperation with the New York State Department of Health (NYSDOH) has reviewed the revised Remedial Investigation/Interim Remedial Measures/Alternatives Analysis Report (RI/IRM/AAR) dated December 2015. The RI/IRM/AAR is approved.

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 and RI/IRM/AAR are placed in the document repository.

Thank you for your cooperation in this matter. If you have any questions, please call the Project Manager, Michael Hinton, at 716-851-7220 or email him at michael.hinton@dec.ny.gov.

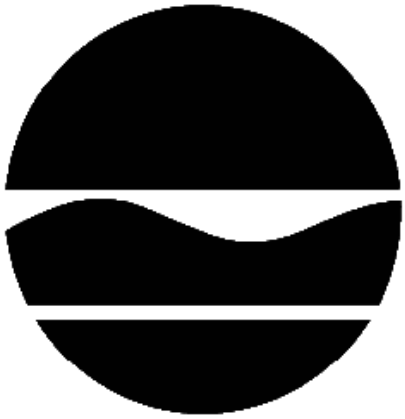
Sincerely,

Michael J. Cruden P.E.
Director
Remedial Bureau E
Division of Environmental Remediation

Enclosure
ec: R. Schick, DER
M. Ryan, DER
M. Hinton, Region 9
G. Sutton, Region 9
J. Dougherty, Region 9
S. Selmer, NYSDOH, Albany

DECISION DOCUMENT

401,402 and 430 Buffalo Avenue Site
Brownfield Cleanup Program
Niagara Falls, Niagara County
Site No. C932164
December 2015



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

DECLARATION STATEMENT - DECISION DOCUMENT

401,402 and 430 Buffalo Avenue Site
Brownfield Cleanup Program
Niagara Falls, Niagara County
Site No. C932164
December 2015

Statement of Purpose and Basis

This document presents the remedy for the 401,402 and 430 Buffalo Avenue 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 401,402 and 430 Buffalo Avenue 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:

With the completion of the IRMs the selected remedy is a Track 2: Residential use with generic soil cleanup objectives remedy for the 401 and 402 Buffalo Ave parcels and a Track 4 Restricted Residential Use remedy is proposed for the 430 Buffalo Ave parcel.

Based on the results of the investigations at the site, the IRMs that have been performed, and the evaluation presented here, the Department is proposing No Further Action as the remedy for the site. This No Further Action proposed remedy includes the following additional elements:

1. Cover System

A site cover installed through an IRM, currently exists and will be maintained to allow for restricted residential use of the parcel 430Buffalo Ave. Any site redevelopment will maintain the existing site cover, which consists either of the structures such as buildings, pavement, sidewalks or soil where the upper two feet of exposed surface soil meets the applicable soil cleanup objectives (SCOs) for restricted residential use. Any fill material brought to the site will meet the requirements for the identified site use as set forth in 6NYCRR part 375-6.7(d).

2. Institutional Control

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

- require 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);

- allow the use and development of the controlled property for residential, restricted residential, residential or industrial use as defined by Part 375-1.8(g), although land use is subject to local zoning laws;
- restrict 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
- require compliance with the Department approved Site Management Plan.

3. Site Management Plan

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

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 as discussed in Paragraph 3 above.
Engineering Controls: The soil cover discussed in Paragraph 2 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, groundwater use restrictions;
- 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.

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.

Michael J Cruden

Digitally signed by Michael J Cruden
DN: cn=Michael J Cruden, o=DER, ou=RBE, email=mjcruden@gw.dec.state.ny.us, c=US
Date: 2015.12.23 09:44:31 -05'00'

Date

Michael Cruden, Director
Remedial Bureau E

DECISION DOCUMENT

401,402 and 430 Buffalo Avenue Site
Niagara Falls, Niagara County
Site No. C932164
December 2015

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 repository:

Niagara Falls Public Library
Attn: Michelle Petrazzoulo
Earl W. Brydges Building
1425 Main Street
Niagara Falls, NY 14305
Phone:

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: This BCP site is located at 401, 402 and 430 Buffalo Avenue, in Niagara Falls, Niagara County. The site is bound by 4th Street to the west, 6th Street and Holly Place to the east, a public alleyway from 4th Street and 6th Street to the north, and the Robert Moses State Parkway with the Niagara River beyond to the south. Buffalo Avenue intersects the property from east to west.

Site Features: The 401 Buffalo Avenue parcel is the location of a former hotel and conference center, parking areas and vegetated/landscaped areas. A portion of the former hotel has been demolished and work is underway on the construction of a new structure.

The 402 and 430 Buffalo Avenue parcels are currently vacant and were part of a former manufacturing facility.

Current Zoning and Land Use: The site is currently vacant located in a highly developed mixed use commercial and residential area. The site is zoned commercial and redevelopment at the site has begun.

Past Use of the Site: Use of the three properties dates back to 1901 when a biscuit plant was located on the 402 and 430 parcels. This facility was Nabisco. Operations included underground fuel oil storage tanks likely for the baking ovens. Additional operations included paper box manufacturing and printing, material handling and shipping equipment, maintenance of manufacturing equipment and vehicles, likely application of pesticides and herbicides related to raw food material and finished goods storage, and use of storage of paint, solvents, thinners, grease and lubricants common along former manufacturing operations.

In 1956, the administration building closed and was leased to Union Carbide as a research facility. In 1963, that building became the first home of Niagara County Community College. That same year, the old factory building was demolished.

Records indicate that the 401 parcel was used as a park area along the Niagara River as part of the greater manufacturing plant property. This site was later redeveloped into the former hotel facility in the early 1980's.

Geology and Hydrogeology: The Niagara Falls region is underlain by Silurian and Devonian age stratified limestone, dolomite and shale of marine origin. The primary bedrock type that forms the bedrock surface is fine to course grained Lockport Dolomite. Groundwater in the area is affected by the Niagara River. Bedrock groundwater flow generally is in a Northwesterly direction. The

Niagara River near the Falls is a recharge zone for bedrock groundwater. Overburden groundwater flow was determined to be in a Southeasterly direction toward the Niagara River at an average depth across the site of 7 feet below ground surface. The depth to groundwater ranged from 5.3 feet to 10.6 feet below the ground surface.

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, alternatives (or an alternative) that restrict(s) the use of the site to residential use (which allows for restricted-residential use, commercial use and industrial use) as described in Part 375-1.8(g) were/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(s) under the Brownfield Cleanup Agreement is a/are Volunteer(s). The Applicant(s) does/do 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:

PCB aroclor 1260
lead
barium
chromium
mercury
benzo(a)anthracene
benzo(a)pyrene
benzo(b)fluoranthene
dibenz[a,h]anthracene
indeno(1,2,3-CD)pyrene
1,2,4-trimethylbenzene

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.

The following IRM(s) has/have been completed at this site based on conditions observed during the RI.

Building Demolition, PCB, Radiological Material, Soil and Debris Removal

An Interim Remedial Measure Work Plan was approved in December 2014 that included the demolition and removal of a portion of the existing structure that included the removal of abandoned containers of chemicals and maintenance fluids and cleaning of sumps on the 401 parcel. The pre-demolition survey also discovered a PCB oil spill from vandalized transformers. The PCB spill was assigned Spill Number 1312160 which has been closed with the successful completion of the IRM. In addition a post demolition radiological scan indicated the presence technically enhanced naturally occurring radioactive material (TENORM) slag used as fill on site. The following IRMs were performed:

- Building demolition including the disposal of universal waste, sediments in trench drains and chemical waste found in the building;
- Excavation and off-site disposal of 1050 cy of TENORM slag found in various areas of the site;
- Cleanup and off-site disposal of impacted building materials in the PCB transformer room,
- Excavation and off-site disposal of petroleum impacted soil areas; and
- Excavation and off-site disposal of metals and PAH impacted soil/fill areas.

In addition, an IRM Work Plan Addendum was approved in September 2015 that included:

- Excavation and off-site disposal of TENORM at the 402 Buffalo Ave parcel that exceeded background levels, and
- Excavation and off-site disposal of soil/fill in the 430 Buffalo Ave parcel that exceeded the industrial SCOs for lead.

A cover system has also been installed on the 430 Buffalo Ave parcel which consists of soil where the upper two feet of exposed surface soil meets the applicable soil cleanup objectives (SCOs) for restricted residential use. Where the cover system extends above grade a demarcation layer has been installed.

The IRMs were satisfactorily completed and are fully described in the RI/AA/IRM Report dated December 4, 2015 and the Final Engineering Report.

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:

The IRMs were successfully completed that addressed the environmental concerns on parcels at 401 and 402 Buffalo Avenue. Post IRM confirmatory sampling that residential RSOs were achieved. No off-site impacts were identified from the 401 and 402 Buffalo Ave parcels. The

residential RSOs include analysis for volatile organic compounds, semi-volatile organic, PCB/pesticides and metals.

430 Buffalo Avenue Parcel:
No detections of any Volatile Organic Compounds (VOCs), Polychlorinated biphenyls (PCB), pesticide and herbicide compounds were found above the residential soil cleanup objectives (RSCO). The remaining contamination on the 430 parcel include several SVOC compounds including benzo(a)anthracene (up to 31 part per million (ppm)), benzo(b)fluoranthene (up to 38 ppm), benzo(k)fluoranthene (up to 14 ppm), chrysene (up to 31 ppm), dibenzo(a,h)anthracene (up to 5 ppm) and ideno(1,2,3-cd)pyrene (up to 19 ppm) all were detected above their respective RSCOs. Metals were also found including barium (up to 1400 ppm), lead (up to 2400 ppm) and zinc (up to 2500 ppm) again all detected above their respective RSCOs. PAH and metal contamination was detected above residential RSOs along the northern and eastern property lines adjacent the alley and 6th Street.

A radiological Site survey was also performed on all three parcels. The IRMs addressed the TENORM found on the 401 and 402 parcels. No detections of radiation above normally expected background levels were observed on the 430 parcel.

Groundwater was evaluated during the RI that included analysis for volatile organic compounds, semi-volatile organic, PCB/pesticides and metals. The RI indicated little impact to site groundwater from site contaminants. Benzene was detected in one monitoring well at 1.6 parts per billion (ppb) slightly above the groundwater standard of 1 ppb while 1,2,4-trimethylbenzene was detected in two wells at 5.3 and 7.3 ppb slightly above the groundwater standard of 5 ppb. Groundwater flow in the overburden zone was determined to be in the south easterly direction

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.*

People will not come in contact with contaminated sub-surface soil unless they dig below the surface materials. People are not drinking the contaminated groundwater because the area is served by a public water supply that is not affected by this contamination.

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.

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 Final Remedy for the 401, 402 & 430 Buffalo Ave Site. The elements of the selected remedy, as shown in Figure 2, are as follows:

With the completion of the IRMs the selected remedy is a Track 2: Residential use with generic soil cleanup objectives remedy for the 401 and 402 Buffalo Ave parcels and a Track 4 Restricted Residential Use remedy is proposed for the 430 Buffalo Ave parcel, which is the controlled property. A municipal restriction on groundwater use is in effect by the City of Niagara Falls and Niagara County for the 401 and 402 Buffalo Ave parcels that would eliminate any potential contact with or ingestion of groundwater.

Based on the results of the investigations at the site, the IRMs that have been performed, and the evaluation presented here, the Department is proposing No Further Action as the remedy for the site. This No Further Action proposed remedy includes the following additional elements:

1. Cover System

A site cover installed through an IRM, currently exists and will be maintained to allow for restricted residential use of the parcel 430Buffalo Ave. Any site redevelopment will maintain the existing site cover, which consists either of the structures such as buildings, pavement, sidewalks or soil where the upper two feet of exposed surface soil meets the applicable soil cleanup objectives (SCOs) for restricted residential use. Any fill material brought to the site will meet the requirements for the identified site use as set forth in 6NYCRR part 375-6.7(d).

2. Institutional Control

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

- require 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);
- allow the use and development of the controlled property for , restricted residential, commercial or industrial use as defined by Part 375-1.8(g), although land use is subject to local zoning laws;
- restrict 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
- require compliance with the Department approved Site Management Plan.

3. Site Management Plan

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

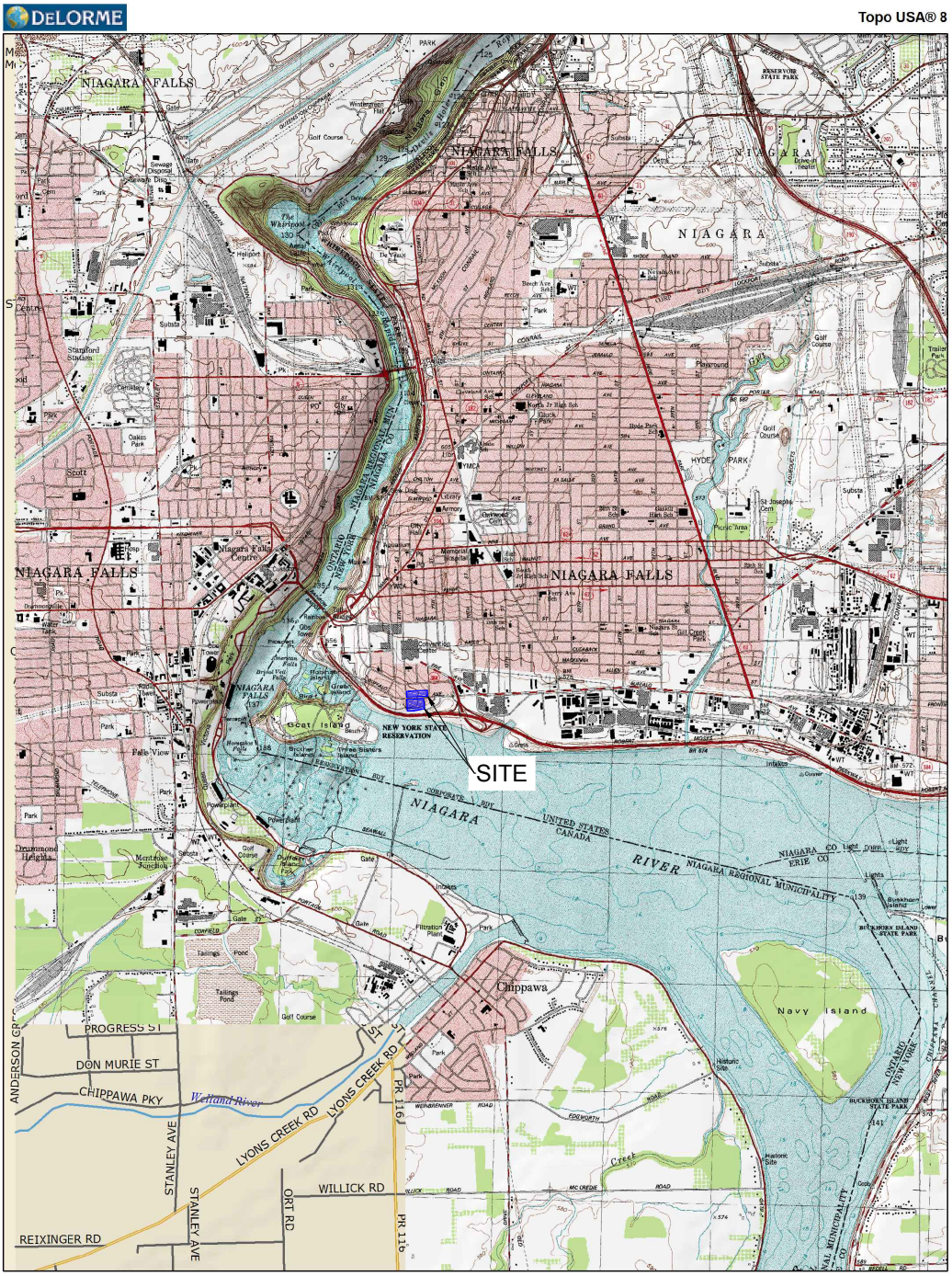
An Institutional and Engineering Control Plan that identifies all use restrictions and engineering controls for the site and details the steps and media-specific requirements necessary to ensure the following institutional and/or engineering controls remain in place and effective:

Institutional Controls: The Environmental Easement as discussed in Paragraph 3 above.
Engineering Controls: The soil cover discussed in Paragraph 2 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, groundwater use restrictions;
- 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.

F:\CAD\TurnKey\Merani Hospitality\401, 402, and 430 Buffalo Ave\RI-IRM-AA REPORT\Figure 1; Site Location and Vicinity Map.dwg

FIGURE 1



TurnKey Environmental Restoration, LLC

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

PROJECT NO.: 0294-013-001

DATE: MARCH 2015

DRAFTED BY: BLR

SITE LOCATION AND VICINITY MAP

RI-IRM-AA REPORT

402 & 430 BUFFALO AVENUE SITE
BCP SITE No. C932164
NIAGARA FALLS, NEW YORK

PREPARED FOR

MERANI HOSPITALITY, INC.

DATE: AUGUST 2015
DRAFTED BY: KRR

SITE PLAN (AERIAL)

Figure 1A

RI-IRM-AA REPORT

402, & 430 BUFFALO AVENUE SITE
BCP SITE NO. C932164
NIAGARA FALLS, NEW YORK

PREPARED FOR

MERANI HOSPITALITY, INC.

TURNKEY ENVIRONMENTAL RESTORATION, LLC
2558 HAMBURG TURNPIKE
SUITE 300
BUFFALO, NY 14218
(716) 856-0635

JOB NO.: 0294-013-001

LEGEND:

- BCP BOUNDARY
- PARCEL BOUNDARY
- MW-1 RI MONITORING WELL LOCATION
- TP-25 RI TEST PIT LOCATION
- SS-7 RI SURFACE SOIL LOCATION
- SB-14 RI SOIL BORING LOCATION
- TP-3 HISTORIC TEST PIT LOCATION
- ISLAND HISTORIC TEST PIT LOCATION
- SB-1 HISTORIC SOIL BORING LOCATION

430 BUFFALO AVE

402 BUFFALO AVE

401 BUFFALO AVE

4TH STREET

6TH STREET

HOLLY PLACE

BUFFALO AVENUE

SB-13, MW-10 / SB-08, MW-5, SB-07, SB-09, SB-10, SB-11, MW-9 / SB-12, TP-22, TP-23, TP-1, TP-2, TP-3, TP-4, SS-4, TP-24, TP-25, TP-26, SB-15, MW-6, SS-7, TP-8, TP-28, TP-29, TP-5, TP-27, TP-6, TP-7, SB-16, SS-6, SS-5, MW-7, MW-8 / SB-14

MW-1 / SB-17, SS-1, PAVEMENT, TP-10, ISLAND TEST PIT, SB-1, EXISTING BUILDING, TP-11, MW-2, SB-18, TP-12, TP-15, TP-16, SB-2, PAVEMENT, TP-14, TP-13, SS-3, TP-17, TP-18, WEST TRENCH, FORMER BUILDING - DEMOLISHED, TP-19, MW-3, SS-2, SOUTH TRENCH, PAVEMENT, SB-3, TP-20, MW-4 / SB-19

N

80' 0' 80' 160'

SCALE: 1 INCH = 80 FEET
SCALE IN FEET
(approximate)

DATE: JUNE 2015
DRAFTED BY: BLR

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

TURNKEY ENVIRONMENTAL RESTORATION, LLC

JOB NO.: 0294-013-001

HISTORIC AND REMEDIAL INVESTIGATION SAMPLE LOCATIONS

RI-IRM-AA REPORT

402 & 430 BUFFALO AVENUE SITE
BCP SITE No. C932164
NIAGARA FALLS, NEW YORK

PREPARED FOR
MERANI HOSPITALITY, INC.

Figure 2

LEGEND:

- BCP BOUNDARY
- PARCEL BOUNDARY
- MW-1 — RI MONITORING WELL LOCATION
- 569.3 — GROUNDWATER ELEVATION (FEBRUARY 2015)
- 570 — GROUNDWATER CONTOUR (DASHED WHERE INFERRED)
- GROUNDWATER FLOW DIRECTION

430 BUFFALO AVE

402 BUFFALO AVE

401 BUFFALO AVE

4TH STREET

6TH STREET

HOLLY PLACE

BUFFALO AVENUE

573.7 MW-10

MW-5 572.2

570.3 MW-6

MW-9 574.4

MW-8 571.0

DRY MW-7

573.0 MW-1

MW-2 569.3

570

572

565

560

559.3 MW-3

560.5 MW-4

PAVEMENT

EXISTING BUILDING

FORMER BUILDING - DEMOLISHED

N

80' 0' 80' 160'

SCALE: 1 INCH = 80 FEET
SCALE IN FEET
(approximate)

DATE: AUGUST 2015
DRAFTED BY: KRR

2558 HAMBURG TURNPIKE
SUITE 300
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(716) 856-0635

JOB NO.: 0294-013-001

GROUNDWATER ISOPOTENTIAL MAP

RI-IRM-AA REPORT
402 & 430 BUFFALO AVENUE SITE
BCP SITE No. C932164
NIAGARA FALLS, NEW YORK
PREPARED FOR
MERANI HOSPITALITY, INC.

Figure 3

LEGEND:

- BCP BOUNDARY
- PARCEL BOUNDARY
- TP-25 RI TEST PIT LOCATION
- SS-7 RI SURFACE SOIL LOCATION
- SB-10 RI SOIL BORING LOCATION
- MW-1 RI MONITORING WELL LOCATION
- ELEVATED RADIOLOGIC FIELD READING ABOVE BACKGROUND)

430 BUFFALO AVE

402 BUFFALO AVE

401 BUFFALO AVE

BUFFALO AVENUE

4TH STREET

6TH STREET

HOLLY PLACE

SB-13, MW-10 / SB-08, SB-07, MW-5, TP-22, SB-09, SB-10, SB-11, MW-9 / SB-12, TP-23, SS-4, TP-24, TP-26, SB-15, MW-6, SS-7, TP-28, TP-29, TP-27, TP-25, SS-5, MW-8 / SB-14, SS-6, SB-16, MW-7

SS-1, MW-1 / SB-17, TP-11, MW-2, SB-18, TP-12, PAVEMENT, TP-10, EXISTING BUILDING, TP-15, TP-16, PAVEMENT, TP-14, TP-13, SS-3, TP-17, TP-18, FORMER BUILDING - DEMOLISHED, TP-19, MW-3, SS-2, PAVEMENT, TP-20, MW-4 / SB-19

N

80' 0' 80' 160'

SCALE: 1 INCH = 80 FEET
SCALE IN FEET
(approximate)

DATE: JUNE 2015
DRAFTED BY: BLR

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

TURNKEY ENVIRONMENTAL RESTORATION, LLC

JOB NO.: 0294-013-001

RI RADIOLOGIC SURVEY RESULTS

RI-IRM-AA REPORT
402 & 430 BUFFALO AVENUE SITE
BCP SITE No. C932164
NIAGARA FALLS, NEW YORK
PREPARED FOR
MERANI HOSPITALITY, INC.

Figure 4

LEGEND:

BCP BOUNDARY

PARCEL BOUNDARY

BUFFALO AVENUE

ISLAND AREA EXCAVATION

COMP-4

COMP-3

COMP-2

COMP-1

PAVEMENT

RADIATION EXCAVATION LIMITS

PAVEMENT

SEE FIGURE 6B

EXISTING BUILDING

4TH STREET

HOLLY PLACE

FORMER CONCRETE

PETRO-MIDDLE

PETRO-WEST

PETRO-EAST

FORMER BUILDING - DEMOLISHED

PETROLEUM AREA EXCAVATION

POOL-NW

SS-2 COMP

POOL-WW

SS-2 EXCAVATION AREA

PAVEMENT

POOL-EW

POOL-BM

POOL-SW

POOL AREA EXCAVATION

N

60' 0' 60' 120'

SCALE: 1 INCH = 60 FEET
SCALE IN FEET
(approximate)

DATE: AUGUST 2015
DRAFTED BY: KRR

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

TURNKEY ENVIRONMENTAL RESTORATION, LLC

JOB NO.: 0294-013-001

401 BUFFALO AVENUE IRM ACTIVITIES

RI-IRM-AA REPORT

402 & 430 BUFFALO AVENUE SITE
BCP SITE No. C932164
NIAGARA FALLS, NEW YORK

PREPARED FOR
MERANI HOSPITALITY, INC.

Figure 5

F:\CAD\TurnKey\Merani Hospitality\401, 402, and 430 Buffalo Ave\FER\Figure 7; 430 Buffalo Avenue TP-3 IRM Activities.dwg

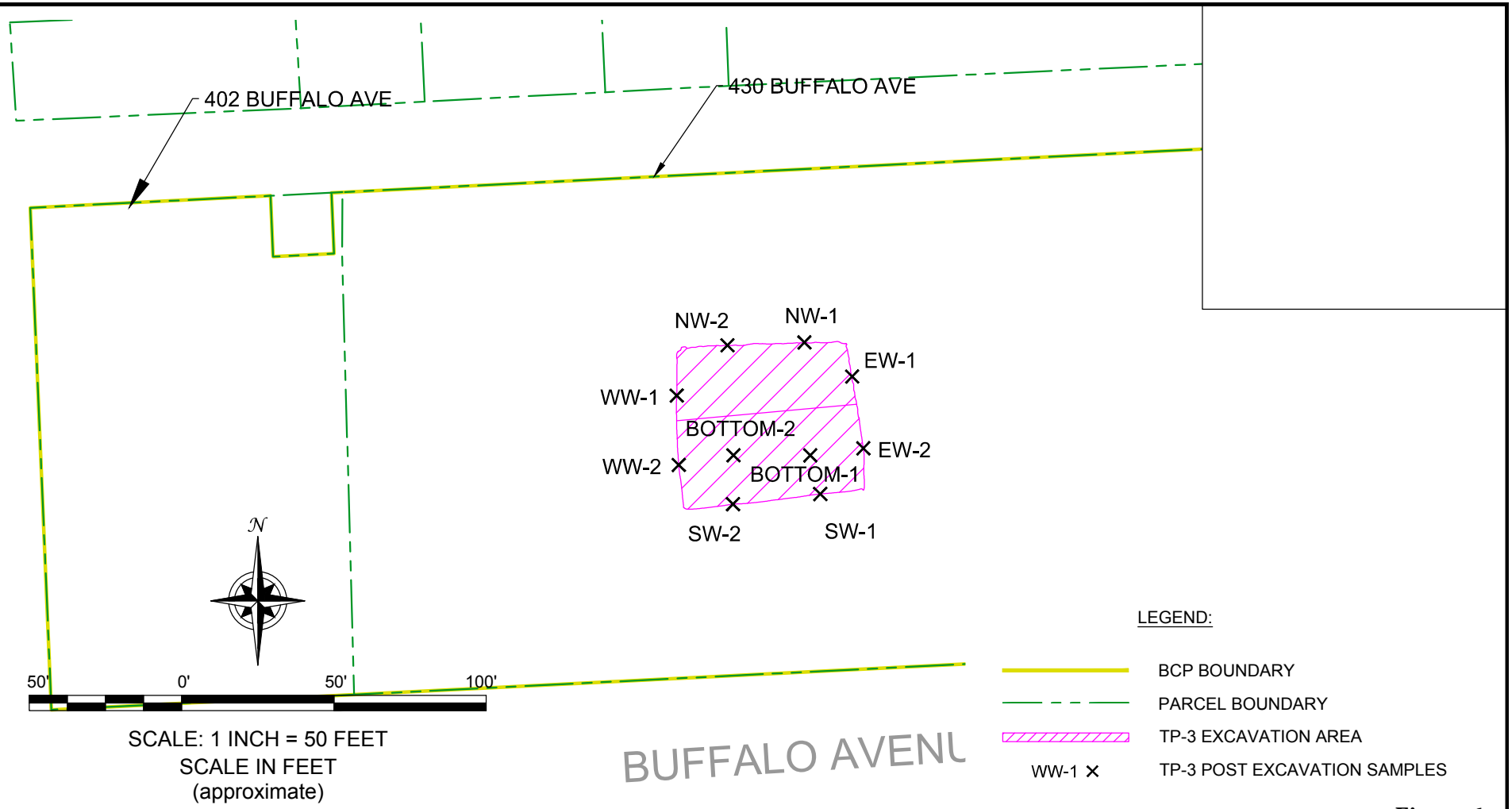


Figure 6

BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC

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

PROJECT NO.: 0294-013-001

DATE: re□NOVEMBER 2015

DRAFTED BY: KRR/NTM

430 BUFFALO AVENUE - TP-3 IRM ACTIVITIES (RECORD DRAWING)

FINAL ENGINEERING REPORT

402 & 430 BUFFALO AVENUE SITE
BCP SITE NO. C932164
NIAGARA FALLS, NEW YORK

PREPARED FOR

MERANI HOSPITALITY, INC.

F:\CAD\TurnKey\Merani Hospitality\401, 402, and 430 Buffalo Ave\RI-IRM-AA REPORT\Figure 9 - Planed Soil Cover Detail.dwg

LEGEND:

BCP BOUNDARY

PARCEL BOUNDARY

SOIL COVER SYSTEM

430 BUFFALO AVE

APPROXIMATE SOIL COVER

SB-13
MW-5
MW-10 / SB-08
SB-07
SB-10
SB-09
SB-11
MW-9 / SB-12
TP-22
TP-24
TP-1
TP-3 (REMOVED)
TP-2
TP-23
TP-4
TP-25
SS-4
SS-5
MW-8 / SB-14
SB-15
MW-6
SS-7
TP-8
TP-28
TP-26
TP-29
TP-5
TP-27
TP-7
TP-6
SS-6
SB-16
MW-7

402 BUFFALO AVE

SOIL COVER DETAILS

APPROVED SOIL COVER MATERIAL (MIN 24" THICKNESS)

1:6 SLOPE APPROXIMATE

EDGE OF SOIL COVER / PROPERTY LIMITS/SILT FENCE

MINIMUM 2.0'

DEMARCATION LAYER

2.0'

EXISTING GRADE

EXISTING SOIL

N

50' 0' 50' 100'

SCALE: 1 INCH = 50 FEET
SCALE IN FEET
(approximate)

DATE: REV NOVEMBER 2015
DRAFTED BY: KRR/NTM

PLANNED SOIL COVER SYSTEM LAYOUT & DETAIL

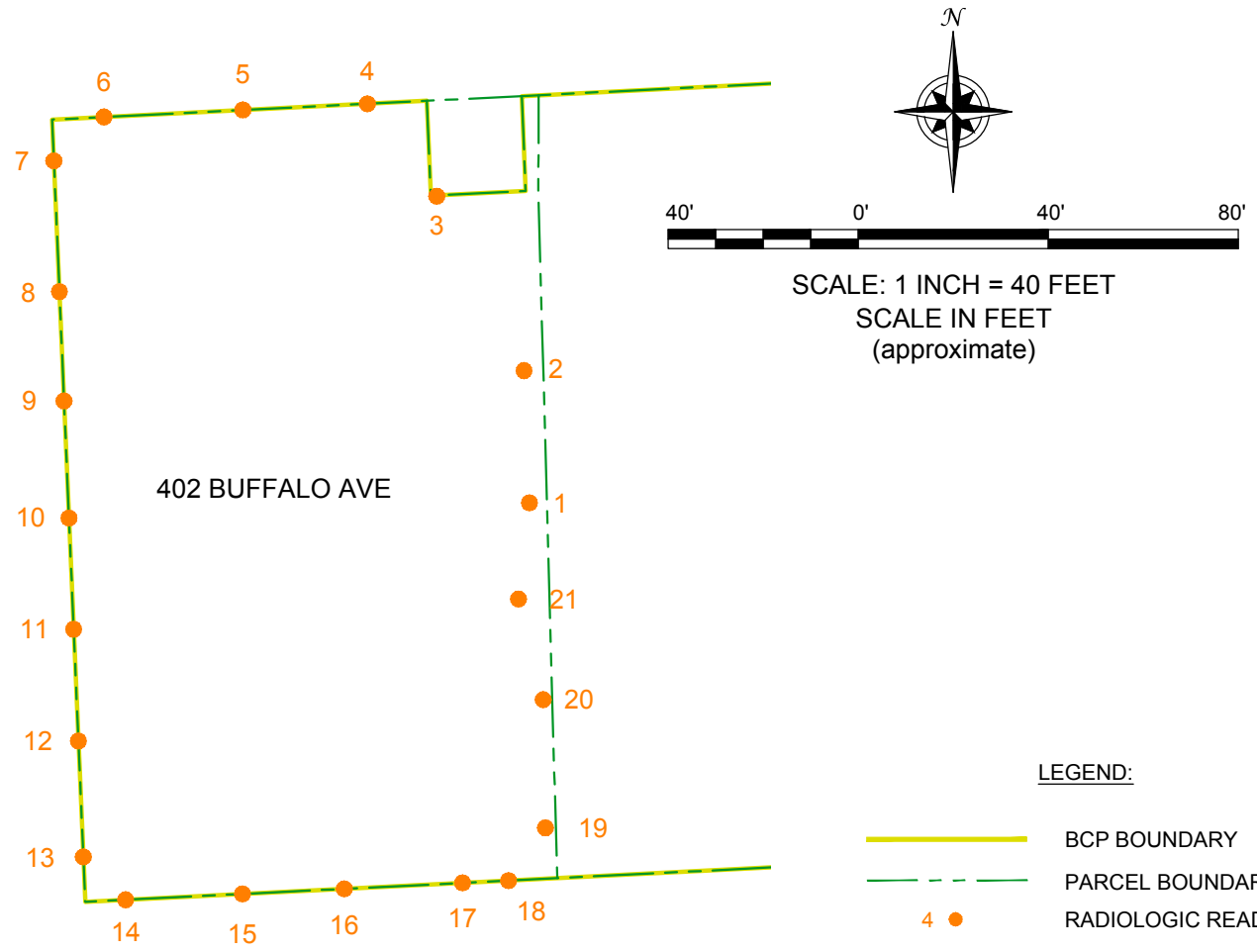
RI-IRM-AA REPORT
402 & 430 BUFFALO AVENUE SITE
BCP SITE No. C932164
NIAGARA FALLS, NEW YORK
PREPARED FOR
MERANI HOSPITALITY, INC.

Figure 7

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

JOB NO.: 0294-013-001

F:\CAD\TurnKey\Merani Hospitality\401, 402, and 430 Buffalo Ave\FER\Figure 8; Post Excavation Radiologic Readings.dwg



RADIOLOGICAL READINGS	
LOCATIONS	CPM
1	5393
2	5223
3	20059
4	20537
5	21565
6	14685
7	10490
8	8487
9	11732
10	28787
11	7976
12	11552
13	37155
14	27426
15	10201
16	8106
17	44441
18	32744
19	3917
20	4995
21	2410

READINGS IN COUNTS PER MINUTE

Figure 8

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

PROJECT NO.: 0294-013-001

DATE: NOVEMBER 2015

DRAFTED BY: KRR

402 BUFFALO AVENUE - IRM ACTIVITIES POST-REMOVAL SCREENING RESULTS

FINAL ENGINERING REPORT

402 & 430 BUFFALO AVENUE SITE
BCP SITE No. C932164
NIAGARA FALLS, NEW YORK

PREPARED FOR

MERANI HOSPITALITY, INC.

TABLE 1

SUMMARY OF RI AND IRM SAMPLING AND ANALYSIS PROGRAM

REMEDIAL INVESTIGATION/INTERIM REMEDIAL MEASURES/ALTERNATIVES ANALYSIS REPORT

402 and 430 BUFFALO AVENUE SITE

NIAGARA FALLS, NEW YORK

Sample Identifier		Data Source	Depth Sampled/ Screened (fbgs)	Analysis						Date Sampled
				TCL plus CP-51 List VOCs	TCL SVOCs	Part 375 List Metals	PCBs	Pesticide	Herbicide	
Surface Soil										
401 Buffalo Avenue Parcel	SS-1	Remedial Investigation	0 - 0.5		1	1				2/10/2015
	SS-2		0 - 0.5		1	1	1			2/9/2015
	SS-3		0 - 0.5		1	1	1	1	1	2/10/2015
402 and 430 Buffalo Avenue Parcels	SS-4		0 - 0.5		1	1				2/10/2015
	SS-5		0 - 0.5		1	1	1	1	1	2/10/2015
	SS-6		0 - 0.5		1	1				2/10/2015
	SS-7		0 - 0.5		1	1				2/10/2015
Subsurface Soil										
401 Buffalo Avenue Parcel	TP-10	Remedial Investigation	2 - 16		1	1				2/10/2015
	TP-11		1 - 3	1	1	1				2/9/2015
	TP-12		6 - 8		1	1				2/9/2015
	TP-13		1 - 3	1	1	1	1	1	1	2/9/2015
	TP-14		4 - 10	1	1	1	1	1	1	2/9/2015
	TP-15		2 - 4		1	1				2/9/2015
	TP-16		4 - 14		1	1				2/9/2015
	TP-17		2 - 15	1	1	1	1	1	1	2/10/2015
	TP-18		1 - 8	1	1	1	1	1	1	2/10/2015
	TP-19		3 - 10		1	1				2/9/2015
	TP-20		1 - 3		1	1	1			2/10/2015
	TP-21		--	1	1	1	1	1	1	--
402 and 430 Buffalo Avenue Parcels	TP-22		1 - 3		1	1				2/11/2015
	TP-23		1 - 16	1	1	1	1	1	1	2/11/2015
	TP-24		1 - 4	1	1	1	1			2/11/2015
	TP-25		1 - 4		1	1				2/11/2015
	TP-26		1 - 3	1	1	1	1	1	1	2/10/2015
	TP-27		2 - 12	1	1	1	1	1	1	2/10/2015
	TP-28		1 - 4		1	1				2/10/2015
	TP-29		1 - 4		1	1				2/10/2015
401 Buffalo Avenue Parcel	MW-1		5-16		1	1	1			2/24/2015
	MW-2		0.5-3	1	1	1	1	1	1	2/24/2015
	MW-3		2-8	1	1	1	1	1	1	4/15/2015
	MW-4		3-12		1	1	1			2/25/2015
402 and 430 Buffalo Avenue Parcels	MW-5		2-8	1	1		1			4/14/2015
	MW-6		--							--
	MW-7		1-7	1	1	1	1	1	1	2/25/2015
	MW-8		4-12	1	1	1	1	1	1	2/25/2015
	MW-9		1-8		1	1				2/25/2015
	MW-9		13-16		1	1	1			2/25/2015
	SB - 7		1-5		1	1				2/25/2015
	SB - 8		8-10	1	1	1	1	1	1	2/25/2015
	SB - 9		--							--
	SB - 10		--							--
	SB - 11		1-16		1	1				2/10/2015
Groundwater										
401 Buffalo Avenue Parcel	MW-1	Remedial Investigation	13'-18'	1	1	1	1	1	1	4/16/2015
	MW-2		8'-13'	1	1	1	1	1	1	4/16/2015 & 5/8/2015
	MW-3		9'-14'	1	1	1	1	1	1	4/17/2015
	MW-4		8.5'-13.5'	1	1	1	1	1	1	4/17/2015
402 and 430 Buffalo Avenue Parcel	MW-5		12'-17'	1	1	1	1	1	1	4/17/2015
	MW-6		9'-14'	1	1	1	1	1	1	4/16/2015
	MW-7		6.5'-11.5'	1						6/10/2015
	MW-8		6.5'-11.5'	1	1	1	1	1	1	4/16/2015
	MW-9		11'-16'	1	1	1	1	1	1	4/17/2015
	MW-10		9'-14'	1	1	1	1	1	1	4/17/2015
Interim Remedial Measures - Post-Remedial Verification Samples										
401 Buffalo - Petroleum Area	East	IRM	--	1	1					4/14/2015
	Middle	IRM	--	1	1					4/14/2015
	West	IRM	--	1	1					4/14/2015
401 Buffalo - Parking Lot Area	Bottom Comp 1	IRM	--			1				6/3/2015
	Bottom Comp 2	IRM	--			1				6/3/2015
	Bottom Comp 3	IRM	--			1				6/3/2015
	Bottom Comp 4	IRM	--			1				6/3/2015
401 Buffalo - Pool Area	North Wall	IRM	--			1				6/4/2015
	South Wall	IRM	--			1				6/4/2015
	East Wall	IRM	--			1				6/4/2015
	West Wall	IRM	--			1				6/4/2015
	Bottom	IRM	--			1				6/4/2015
401 Buffalo - Southern Gas Line	Southern Gas Line	IRM	--		1	1				6/4/2015
401 Buffalo - SS-2 Area	SS-2 Comp.	IRM	--			1				6/4/2015
401 Buffalo - Transformer Room Soil Post-Ex	A1	IRM	--				1			7/22/2015
	B1	IRM	--				1			7/22/2015
	C1	IRM	--				1			7/22/2015
	D1	IRM	--				1			7/22/2015
	E1	IRM	--				1			7/22/2015
	F1	IRM	--				1			7/22/2015
	G2	IRM	--				1			7/22/2015
	H2	IRM	--				1			7/22/2015
	Pipe Sediment	IRM	--				1			7/23/2015
401 Buffalo - transformer Room Wipe Samples	South Footer	IRM					1			7/27/2015
	South Wall	IRM					1			7/27/2015
	West Footer	IRM					1			7/27/2015
	West Wall	IRM					1			7/27/2015

TABLE 2

SUMMARY OF TRANSFORMER ROOM PCB WIPE SAMPLE RESULTS

REMEDIAL INVESTIGATION/INTERIM REMEDIAL MEASURES/ALTERNATIVES ANALYSIS REPORT

402 and 430 BUFFALO AVENUE SITE

NIAGARA FALLS, NEW YORK

Parameter[1]	Wipe Sample 1	Wipe Sample 2	Housing 103
	11/11/2014		
Polychlorinated biphenyls (PCBs) - ug/Abs			
Aroclor 1016	ND	ND	ND
Aroclor 1221	ND	ND	ND
Aroclor 1232	ND	ND	ND
Aroclor 1242	ND	ND	ND
Aroclor 1248	ND	ND	ND
Aroclor 1254	ND	ND	ND
Aroclor 1260	77.6	276	322
Aroclor 1262	ND	ND	ND
Aroclor 1268	ND	ND	ND
Total Polychlorinated Biphenyls	77.6	276	322

Notes:

1. Sample results were reported by the laboratory in ug/Abs; equivalent to ug/100 cm^2.

Definitions:

ND = Parameter not detected above laboratory detection limit.

TABLE 3

SUMMARY OF HISTORIC SUBSURFACE SOIL/FILL ANALYTICAL RESULTS

REMEDIAL INVESTIGATION / INTERIM REMEDIAL MEASURES / ALTERNATIVE ANALYSIS REPORT

402 and 430 BUFFALO AVENUE SITE

NIAGARA FALLS, NEW YORK

Parameter[1]	Unrestricted Use SCOs[2]	Restricted Residential Use SCOs[2]	Commercial Use SCOs[2]	Sample Locations											
				SB-1 (0-2)	SB-2 (6-8)	TP-1 (1-6)	TP-3 (1-4.5)	TP-4 (1-2)	TP-5 (1-3)	TP-6 (2-4)	TP-7 (2-4)	WEST TRENCH	SOUTH TRENCH	ISLAND TEST PIT	POOL TEST PIT
				10/3/2013		10/4/2013						8/26/2014			
Volatile Organic Compounds (VOCs) - mg/Kg [3]															
Total VOCs	--	--	--	ND	ND	--	--	--	--	--	--	--	--	--	--
Semi-Volatile Organic Compounds (SVOCs) - mg/Kg [3]															
Acenaphthene	**20**	**100**	**500**	ND	ND	0.35	1.4	ND	2.2	0.046 J	0.052 J	ND	8.2	ND	ND
Anthracene	**100**	**100**	**500**	0.042 J	ND	0.96	3.1	ND	9.8	ND	0.2	2.2 J	16	0.074 J	ND
Benzo(a)anthracene	**1**	**1**	**5.6**	0.21	ND	**3.3**	**5.9**	0.1 J	**31**	0.14	0.47	**10**	**43**	0.32	ND
Benzo(a)pyrene	**1**	**1**	**1**	0.19	ND	**2.9**	**5.1**	0.087 J	**30**	0.12 J	0.41	**12**	**43**	0.28	ND
Benzo(b)fluoranthene	**1**	**1**	**5.6**	0.31	ND	**3.8**	**6.3**	0.12	**38**	0.16	0.53	**25**	**57**	0.32	ND
Benzo(g,h,i)perylene	**100**	**100**	**500**	0.14 J	ND	1.8	3.1	0.061 J	18	0.077 J	0.22	14	29	0.15	ND
Benzo(k)fluoranthene	**0.8**	**3.9**	**56**	0.095 J	ND	**1.4**	**2.5**	0.05 J	**14**	0.06 J	0.23	**9.3**	**24**	0.17	ND
Chrysene	**1**	**3.9**	**56**	0.31	ND	**3.2**	5.7	ND	**31**	0.15	0.47	**21**	**46**	0.34	ND
Dibenzo(a,h)anthracene	**0.33**	**0.33**	**0.56**	ND	ND	**0.49**	**0.82**	ND	**5**	ND	0.069 J	**2.3 J**	**7.3**	0.046 J	ND
Fluoranthene	**100**	**100**	**500**	0.63	ND	6.8	12	0.18	68	0.27	0.93	31	99	0.48	ND
Fluorene	**30**	**100**	**500**	ND	ND	0.4	1.4	ND	2.8	ND	0.061 J	ND	7.3	ND	ND
Indeno(1,2,3-cd)pyrene	**0.5**	**0.5**	**5.6**	0.13 J	ND	**1.9**	**3.2**	0.059 J	**19**	0.082 J	0.24	**14**	**32**	0.16	ND
Naphthalene	**12**	**100**	**500**	0.11 J	ND	0.16 J	1.9	ND	0.92 J	ND	ND	ND	3.7 J	ND	ND
Phenanthrene	**100**	**100**	**500**	0.52	ND	4	11	0.094 J	29	0.17	0.65	13	66	0.18	ND
Pyrene	**100**	**100**	**500**	0.5	ND	5.6	10	0.16	56	0.23	0.75	23	72	0.42	ND
Polychlorinated biphenyls (PCBs) - mg/Kg [3]															
Aroclor 1260	--	--	--	--	--	ND	ND	--	0.0284 J	--	ND	--	--	--	--
Total PCBs	**0.1**	**1**	**1**	--	--	--	--	--	0.0284 J	--	--	--	--	--	--
Metals - mg/Kg															
Arsenic	**13**	**16**	**16**	7.2	1.1	9.6	8.9	--	6	--	6.3	7.1	4.7	21	3.6
Barium	**350**	**400**	**400**	64	12	**950**	**1000**	--	**970**	--	59	160	150	84	25
Cadmium	**2.5**	**4.3**	**9.3**	0.72	0.92	2.1	2.1	--	1.8	--	0.78	**2.6**	**8.2**	0.24 J	0.42 J
Chromium	**30**	**180**	**1500**	7.6	3	27	19	--	8.9	--	9.6	**32**	**98**	9.7	7.6
Lead	**63**	**400**	**1000**	**100**	23	**2700**	**6200**	--	**2100**	--	**130**	36	**150**	**540**	21
Selenium	**3.9**	**180**	**1500**	ND	ND	ND	ND	--	ND	--	ND	0.76 J	2 J	0.26 J	ND
Silver	**2**	**8.3**	**1500**	0.12 J	ND	0.2 J	0.24 J	--	0.22 J	--	ND	0.68 J	0.39 J	ND	ND
Mercury	**0.18**	**0.73**	**2.8**	ND	ND	0.05 J	0.03 J	--	0.17	--	0.09	0.18 J	**1**	**0.29**	0.03 J

401 Buffalo Ave

430 Buffalo Ave Cover System

401Buffalo Ave IRMs

Notes:

1. Only those parameters detected at a minimum of one sample location are presented in this table; all other compounds were reported as non-detect.
2. Values per 6NYCRR Part 375 Soil Cleanup Objectives (December 2006).
3. Sample results were reported by the laboratory in ug/kg and converted to mg/kg for comparison to SCOs.

Definitions:

ND = Parameter not detected above laboratory detection limit.

"--" = No SCO available for the parameter.

J = Estimated value; result is less than the sample quantitation limit but greater than zero.

BOLD	= Result exceeds Part 375 Unrestricted Use SCOs.
BOLD	= Result exceeds Part 375 Restricted Residential Use SCOs.
BOLD	= Result exceeds Part 375 Commercial Use SCOs.

TABLE 4

SUMMARY OF SURFACE SOIL ANALYTICAL RESULTS

REMEDIAL INVESTIGATION / INTERIM REMEDIAL MEASURES / ALTERNATIVE ANALYSIS REPORT

402 AND 430 BUFFALO AVENUE SITE

NIAGARA FALLS, NEW YORK

PARAMETER[1]	Unrestricted Use SCOs[2]	Restricted Residential Use SCOs[2]	Commercial Use SCOs[2]	SAMPLE LOCATION						
				SS-1	SS-2	SS-3	SS-4	SS-5	SS-6	SS-7
				2/9-10/2015						
Semi-Volatile Organic Compounds (SVOCs) - mg/Kg [3]										
Anthracene	**100**	**100**	**500**	0.082 J	0.076 J	ND	ND	ND	0.034 J	ND
Benzaldehyde	**--**	**--**	**--**	ND	ND	ND	ND	0.1 J	ND	0.077 J
Benzo(a)anthracene	**1**	**1**	**5.6**	0.23	0.24	0.12 J	0.042 J	0.051 J	0.11 J	0.059 J
Benzo(a)pyrene	**1**	**1**	**1**	0.22	0.23	0.14 J	ND	0.049 J	0.11 J	0.067 J
Benzo(b)fluoranthene	**1**	**1**	**5.6**	0.31	0.3	0.21	0.049 J	0.071 J	0.12	0.11
Benzo(ghi)perylene	**100**	**100**	**500**	0.13 J	0.13 J	0.093 J	ND	ND	0.062 J	0.058 J
Benzo(k)fluoranthene	**0.8**	**3.9**	**56**	0.13	0.14	0.091 J	ND	ND	0.055 J	0.04 J
Carbazole	**--**	**--**	**--**	0.048 J	0.047 J	ND	ND	ND	ND	ND
Chrysene	**1**	**3.9**	**56**	0.25	0.24	0.14	0.037 J	0.054 J	0.1 J	0.067 J
Fluoranthene	**100**	**100**	**500**	0.5	0.48	0.26	0.073 J	0.11	0.22	0.091 J
Indeno(1,2,3-cd)pyrene	**0.5**	**0.5**	**5.6**	0.15 J	0.14 J	0.1 J	ND	ND	0.063 J	0.061 J
Phenanthrene	**100**	**100**	**500**	0.34	0.34	0.15	ND	0.062 J	0.15	0.039 J
Phenol	**100**	**100**	**500**	ND	ND	ND	ND	0.3	ND	ND
Pyrene	**100**	**100**	**500**	0.39	0.39	0.21	0.059 J	0.087 J	0.19	0.079 J
Metals - mg/Kg										
Arsenic	**13**	**16**	**16**	9.5	**18**	8.9	4.9	5.6	12	2.6
Barium	**350**	**400**	**400**	86	60	65	6.7	6.8	66	13
Beryllium	**7.2**	**72**	**590**	0.52	0.32	0.45	0.07 J	0.06 J	0.31	ND
Cadmium	**2.5**	**4.3**	**9.3**	0.24 J	0.38 J	0.24 J	0.94	0.28 J	0.6	1.3
Chromium	**30**	**180**	**1500**	**34**	14	23	3	2.8	16	2.4
Copper	**50**	**270**	**270**	18	16	14	3.5	3.6	16	4.2
Lead	**63**	**400**	**1000**	29	**78**	24	41	36	**96**	42
Manganese	**1600**	**2000**	**10000**	490	380	660	440	510	630	460
Mercury	**0.18**	**0.81**	**2.8**	0.17	**0.21**	0.14	0.04 J	0.02 J	**0.24**	0.06 J
Nickel	**30**	**310**	**310**	17	21	12	3	2.6	11	2.6
Selenium	**3.9**	**180**	**1500**	0.34 J	0.27 J	0.17	0.24 J	0.22 J	0.29 J	ND
Silver	**2**	**180**	**1500**	ND	ND	ND	0.1 J	ND	0.11 J	ND
Zinc	**109**	**10000**	**10000**	85	99	77	**280**	82	**200**	**410**
Polychlorinated biphenyls (PCBs) - mg/Kg [3]										
Aroclor 1248	**--**	**--**	**--**	--	ND	ND	--	0.0128 J	--	--
Total PCBs	**0.1**	**1**	**1**	--	ND	ND	--	0.0128 J	--	--
Pesticides and Herbicides - mg/Kg [3]										
4,4'-DDT	**0.0033**	**7.9**	**47**	--	--	0.00228 J	--	ND	--	--

Notes:

1. Only those parameters detected at a minimum of one sample location are presented in this table; all other compounds were reported as non-detect.
2. Values per 6NYCRR Part 375 Soil Cleanup Objectives (SCOs).
3. Sample results were reported by the laboratory in ug/kg and converted to mg/kg for comparisons to SCOs.

401 Buffalo Ave

430 Buffalo Ave

Definitions:

ND = Parameter not detected above laboratory detection limit.
"--" = No value available for the parameter; Parameter not analysed for.
J = Estimated value; result is less than the sample quantitation limit but greater than zero.

Bold	= Result exceeds Unrestricted Use SCOs.
Bold	= Result exceeds Restricted Residential Use SCOs.
Bold	= Result exceeds Commercial Use SCOs.

TURNKEY ENVIRONMENTAL RESTORATION, LLC

TABLE 5

SUMMARY OF SUBSURFACE SOIL/FILL ANALYTICAL RESULTS

REMEDIAL INVESTIGATION / INTERIM REMEDIAL MEASURES / ALTERNATIVE ANALYSIS REPORT

402 AND 430 BUFFALO AVENUE SITE

NIAGARA FALLS, NEW YORK

PARAMETER[1]	Unrestricted Use SCOs [2]	Restricted Residential Use SCOs [2]	Commercial Use SCOs [2]	SAMPLE LOCATION (DEPTH)														
				TP-10 (2-16')	TP-11 (1-3')	TP-12 (6-8')	TP-13 (1-3')	TP-14 (4-10')	TP-15 (2-4')	TP-16 (4-14')	TP-17 (2-15')	TP-18 (1-8')	TP-19 (1-3')	TP-20 (1-3')	TP-22 (1-3')	TP-23 (1-16')	TP-24 (1-4')	TP-25 (1-4')
				2/10/2015	2/9/2015						2/10/2015		2/10/2015	2/9/2015	2/11/2015			
Volatile Organic Compounds (VOCs) - mg/Kg [3]																		
1,2,4-Trimethylbenzene	**3.6**	**52**	**190**	--	ND	--	ND	ND	--	--	ND	ND	--	--	--	ND	ND	--
1,3,5-Trimethylbenzene	**8.4**	**52**	**190**	--	ND	--	ND	ND	--	--	ND	ND	--	--	--	ND	ND	--
Acetone	**0.05**	**100**	**500**	--	ND	--	**0.061 J**	0.044 J	--	--	ND	ND	--	--	--	ND	0.011 J	--
Cyclohexane	**--**	**--**	**--**	--	ND	--	ND	ND	--	--	ND	ND	--	--	--	ND	ND	--
Isopropylbenzene (Cumene)	**--**	**--**	**--**	--	ND	--	ND	ND	--	--	ND	ND	--	--	--	ND	ND	--
Methylcyclohexane	**--**	**--**	**--**	--	ND	--	ND	ND	--	--	ND	ND	--	--	--	ND	ND	--
n-Butylbenzene	**12**	**--**	**--**	--	ND	--	ND	ND	--	--	ND	ND	--	--	--	ND	ND	--
n-Propylbenzene	**3.9**	**100**	**500**	--	ND	--	ND	ND	--	--	ND	ND	--	--	--	ND	ND	--
sec-Butylbenzene	**11**	**100**	**500**	--	ND	--	ND	ND	--	--	ND	ND	--	--	--	ND	ND	--
Tetrachloroethene	**1.3**	**19**	**150**	--	ND	--	ND	ND	--	--	ND	ND	--	--	--	ND	0.0012	--
Toluene	**0.7**	**100**	**500**	--	ND	--	ND	ND	--	--	ND	ND	--	--	--	ND	0.0011 J	--
Trichloroethene	**0.47**	**21**	**200**	--	ND	--	ND	ND	--	--	ND	ND	--	--	--	ND	0.0012	--
Total Xylenes	**0.26**	**100**	**500**	--	ND	--	ND	ND	--	--	ND	ND	--	--	--	ND	ND	--
Semi-Volatile Organic Compounds (SVOCs) - mg/Kg [3]																		
2-Methylnaphthalene	**--**	**--**	**--**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.4 J	ND	ND	0.48 J
Benzo(a)anthracene	**1**	**1**	**5.6**	ND	ND	0.05 J	ND	ND	ND	ND	ND	ND	ND	ND	**7.7**	ND	**1.8**	**12**
Benzo(b)fluoranthene	**1**	**1**	**5.6**	ND	ND	0.071 J	ND	ND	ND	ND	ND	ND	ND	ND	**8.3**	ND	**2.2**	**15**
Chrysene	**1**	**3.9**	**56**	ND	ND	0.057 J	ND	ND	ND	ND	ND	ND	ND	ND	**7.1**	ND	**1.6**	**12**
Dibenzofuran	**7**	**59**	**350**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.82 J	ND	0.088 J	1.2
Fluoranthene	**100**	**100**	**500**	ND	ND	0.11	ND	ND	ND	ND	ND	ND	ND	0.042 J	15	ND	3.8	24
Fluorene	**30**	**100**	**500**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.3	ND	ND	2.2
Phenanthrene	**100**	**100**	**500**	ND	ND	0.039 J	ND	ND	ND	ND	ND	ND	ND	ND	14	ND	1.8	17
Pyrene	**100**	**100**	**500**	ND	ND	0.09 J	ND	ND	ND	ND	ND	ND	ND	ND	13	ND	2.9	19
Total PAHs	**--**	**--**	**500**	--	--	0.468 J	--	--	--	--	--	--	--	0.042	93.65	--	21.685	160.2
Metals - mg/Kg																		
Arsenic	**13**	**16**	**16**	4.6	5.2	2.9	6.4	4.3	4.1	4.3	4.9	4.3	5.3	4.9	10	3	9.5	5.1
Barium	**350**	**400**	**400**	18	66	21	34	22	18	29	10	9.3	43	47	**1400**	22	**780**	300
Beryllium	**7.2**	**72**	**590**	0.19 J	0.41	0.13 J	30	0.14 J	0.16 J	0.17 J	0.18 J	0.18 J	0.33	0.33	0.19 J	0.16 J	0.27	0.22
Cadmium	**2.5**	**4.3**	**9.3**	0.07 J	0.77	0.59	0.28 J	0.98	0.24 J	0.3 J	0.13 J	0.07 J	0.12 J	0.49 J	1	0.07 J	1 J	0.49 J
Chromium	**30**	**180**	**1500**	6.5	11	**36**	8.2	5.4	5.8	6.2	5.8	6	11	16	15	6.1	11	10
Copper	**50**	**270**	**270**	6.6	16	7	8.8	8.2	6.2	7.1	8	6.8	9.5	20	81	5.6	28	14
Lead	**63**	**400**	**1000**	4.5	**73**	18	20	46	7.4	11	11	3.8	6.9	23	**2400**	4.2	**1100**	**320**
Manganese	**1600**	**2000**	**10000**	340	870	380	660	390	360	360	340	380	290	260	320	330	320	260
Mercury	**0.18**	**0.81**	**2.8**	ND	0.1	0.02 J	0.12	0.03 J	ND	ND	0.02 J	ND	0.02 J	0.16	**0.29**	ND	**0.2**	**0.52 J**
Nickel	**30**	**310**	**310**	7.5	11	5.2	9.3	5.4	6.6	6.8	6.2	7.2	11	6.6	6.8	7.1	9.4	6.2
Silver	**2**	**180**	**1500**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.14 J	ND	0.13 J	ND
Zinc	**109**	**10000**	**10000**	37	**300**	**140**	81	**200**	62	67	51	32	59	**110**	**2500**	36	**1000**	**320**
Polychlorinated biphenyls (PCBs) - mg/Kg [3]																		
Aroclor 1254	**--**	**--**	**--**	**--**	**--**	**--**	ND	ND	**--**	**--**	ND	ND	**--**	ND	**--**	ND	ND	**--**
Total PCBs	**0.1**	**1**	**1**	**--**	**--**	**--**	ND	ND	**--**	**--**	ND	ND	**--**	ND	**--**	ND	ND	**--**
Pesticides and Herbicides - mg/Kg [3]																		
Chlordane	**0.094**	**4.2**	**24**	**--**	--	--	ND	ND	--	--			--	--	--		--	--
cis-Chlordane	**--**	**--**	**--**	**--**	--	--	ND	ND	--	--	ND	ND	--	--	--	ND	--	--
Heptachlor epoxide	**--**	**--**	**--**	**--**	--	--	ND	ND	--	--	ND	ND	--	--	--	ND	--	--
trans-Chlordane	**--**	**--**	**--**	**--**	--	--	ND	ND	--	--	ND	ND	--	--	--	ND	--	--

401 Buffalo Ave

430 Buffalo Ave

Notes:

1. Only those parameters detected at a minimum of one sample location are presented in this table; all other compounds were reported as non-detect.
2. Values per 6NYCRR Part 375 Soil Cleanup Objectives (SCOs).
3. Sample results were reported by the laboratory in ug/kg and converted to mg/kg for comparisons to SCOs.

Definitions:

ND = Parameter not detected above laboratory detection limit.
"--" = No value available for the parameter; Parameter not analysed for.
J = Estimated value; result is less than the sample quantitation limit but greater than zero.
P = The RPD between the results for the two columns exceeds the method-specified criteria.
I= The lower value for the two columns has been reported due to obvious interference.

Bold	= Result exceeds Unrestricted Use SCOs.
Bold	= Result exceeds Restricted Residential Use SCOs.
Bold	= Result exceeds Commercial Use SCOs.

TABLE 5

SUMMARY OF SUBSURFACE SOIL/FILL ANALYTICAL RESULTS

REMEDIAL INVESTIGATION / INTERIM REMEDIAL MEASURES / ALTERNATIVE ANALYSIS REPORT

402 AND 430 BUFFALO AVENUE SITE

NIAGARA FALLS, NEW YORK

PARAMETER[1]	Unrestricted Use SCOs [2]	Restricted Residential Use SCOs [2]	Commercial Use SCOs [2]	SAMPLE LOCATION (DEPTH)															
				TP-26 (1-3')	TP-27 (2-12')	TP-28 (1-4')	TP-29 (1-4')	SB-17 (5-16')	SB-18 (0.5-3')	MW-3 (2-8')	SB-19 (3-12')	MW-5 (2-8')	SB-16 (1-7')	SB-14 (4-12')	SB-12 (1-8')	SB-12 (13-16')	SB-7 (1-5')	SB-8 (8-10')	SB-11 (1-16')
				2/10/2015				2/24/2015		4/15/2015	2/25/2015	4/14/2015	2/25/2015						
Volatile Organic Compounds (VOCs) - mg/Kg [3]																			
1,2,4-Trimethylbenzene	**3.6**	**52**	**190**	ND	ND	--	--	--	ND	ND	--	ND	--	ND	--	--	--	1.4	--
1,3,5-Trimethylbenzene	**8.4**	**52**	**190**	ND	ND	--	--	--	ND	ND	--	ND	--	ND	--	--	--	0.71 J	--
Acetone	**0.05**	**100**	**500**	ND	ND	--	--	--	0.0051 J	0.031	--	ND	--	0.0069 J	--	--	--	**0.44 J**	--
Cyclohexane	**--**	**--**	**--**	ND	ND	--	--	--	ND	ND	--	ND	--	ND	--	--	--	0.43 J	--
Isopropylbenzene (Cumene)	**--**	**--**	**--**	ND	ND	--	--	--	ND	ND	--	ND	--	ND	--	--	--	0.41	--
Methylcyclohexane	**--**	**--**	**--**	ND	ND	--	--	--	ND	ND	--	0.00087 J	--	ND	--	--	--	2.4	--
n-Butylbenzene	**12**	**--**	**--**	ND	ND	--	--	--	ND	ND	--	0.001 J	--	ND	--	--	--	1.1	--
n-Propylbenzene	**3.9**	**100**	**500**	ND	ND	--	--	--	ND	ND	--	0.00082 J	--	ND	--	--	--	0.69	--
sec-Butylbenzene	**11**	**100**	**500**	ND	ND	--	--	--	ND	ND	--	0.0055	--	ND	--	--	--	0.65	--
Tetrachloroethene	**1.3**	**19**	**150**	0.00082 J	0.001 J	--	--	--	ND	ND	--	0.00038 J	--	ND	--	--	--	ND	--
Toluene	**0.7**	**100**	**500**	ND	ND	--	--	--	ND	0.00028 J	--	0.00028 J	--	ND	--	--	--	ND	--
Trichloroethene	**0.47**	**21**	**200**	0.00035 J	ND	--	--	--	ND	ND	--	ND	--	ND	--	--	--	ND	
Total Xylenes	**0.26**	**100**	**500**	ND	ND	--	--	--	ND	ND	--	0.00029 J	--	0.00065 J	--	--	--	0.058 J	--
Semi-Volatile Organic Compounds (SVOCs) - mg/Kg [3]																			
2-Methylnaphthalene	**--**	**--**	**--**	0.84 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.22 J	ND
Benzo(a)anthracene	**1**	**1**	**5.6**	**14**	0.039 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.054 J	ND	ND	ND	ND
Benzo(b)fluoranthene	**1**	**1**	**5.6**	**16**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.048 J	ND	ND	ND	ND
Chrysene	**1**	**3.9**	**56**	**13**	0.039 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.066 J	ND	ND	ND	ND
Dibenzofuran	**7**	**59**	**350**	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.17 J	ND
Fluoranthene	**100**	**100**	**500**	26	0.052 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.057 J	ND	ND	0.27	ND
Fluorene	**30**	**100**	**500**	2.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.19 J	ND
Phenanthrene	**100**	**100**	**500**	23	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.046 J	ND	ND	ND	ND
Pyrene	**100**	**100**	**500**	22	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.067 J	ND	ND	ND	ND
Total PAHs	**--**	**--**	**500**	168.44	0.13	--	--	--	--	--	--	--	--	--	0.338	--	--	0.85	--
Metals - mg/Kg																			
Arsenic	**13**	**16**	**16**	13	3.9	3.3	2.7	3.8	4.4	4.2	3.1	--	7.1	3.1	11	4.2	2.8	3.8	3.8
Barium	**350**	**400**	**400**	**1700**	53	17	17	15	36	52	18	--	48	15	110	96	13	15	10
Beryllium	**7.2**	**72**	**590**	0.41	0.25	0.15 J	0.15 J	0.2 J	0.36	0.33	0.17 J	--	0.32 J	0.14 J	0.18 J	0.38	0.08 J	0.16 J	0.24
Cadmium	**2.5**	**4.3**	**9.3**	1.1	0.14 J	0.5 J	0.49 J	0.08 J	0.17 J	0.1 J	0.17 J	--	0.84 J	0.14 J	0.16 J	0.23 J	0.93	0.11 J	0.11
Chromium	**30**	**180**	**1500**	18	8.7	5.2	5.1	6.6	10	11	6.2	--	9.5	5	3.5	13	3.9	5.6	7.4
Copper	**50**	**270**	**270**	97	9.3	8.1	9.6	6.6	9.2	11	6.7	--	15	6.6	11	17	12	6.5	7.2
Lead	**63**	**400**	**1000**	**2400**	9.9	39	33	5.4	16	18	7.2	--	**83**	14	43	9.8	39	6.7	6.7
Manganese	**1600**	**2000**	**10000**	320	360	550	400	410	260	420	470	--	700	380	330	420	410	360	440
Mercury	**0.18**	**0.81**	**2.8**	**0.46**	ND	0.03 J	0.02 J	ND	0.06 J	ND	ND	--	0.17 J	ND	0.03 J	0.02 J	0.02 J	0.02 J	ND
Nickel	**30**	**310**	**310**	11	9.7	4.9	5.3	8.9	12	12	8.5	--	9.2	6	6.1	16	4.3	7.2	10
Silver	**2**	**180**	**1500**	0.12 J	ND	ND	ND	ND	ND	ND	ND	--	0.14 J	ND	ND	ND	ND	ND	ND
Zinc	**109**	**10000**	**10000**	**2700**	70	**150**	**210**	38	76	**110**	60	--	**300**	50	44	95	**300**	41	52
Polychlorinated biphenyls (PCBs) - mg/Kg [3]																			
Aroclor 1254	**--**	**--**	**--**	ND	ND	--	--	ND	ND	0.0479	ND	ND	ND	ND	--	ND	--	ND	--
Total PCBs	**0.1**	**1**	**1**	ND	ND	--	--	ND	ND	0.0479	ND	ND	ND	ND	--	ND	--	ND	--
Pesticides and Herbicides - mg/Kg [3]																			
Chlordane	**0.094**	**4.2**	**24**	ND	ND	--	--	--	ND	0.0419	--	--	--	ND	--	--	--	ND	--
cis-Chlordane	**--**	**--**	**--**	0.0513	ND	--	--	--	ND	0.00864	--	--	--	ND	--	--	--	ND	--
Heptachlor epoxide	**--**	**--**	**--**	ND	ND	--	--	--	ND	0.00143 J	--	--	--	ND	--	--	--	ND	--
trans-Chlordane	**--**	**--**	**--**	0.0435 P I	ND	--	--	--	ND	0.00601	--	--	--	ND	--	--	--	ND	--

Notes:

1. Only those parameters detected at a minimum of one sample location are presented in this table; all other compounds were reported as non-detect.
2. Values per 6NYCRR Part 375 Soil Cleanup Objectives (SCOs).
3. Sample results were reported by the laboratory in ug/kg and converted to mg/kg for comparisons to SCOs.

Definitions:

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"--" = No value available for the parameter; Parameter not analysed for.
J = Estimated value; result is less than the sample quantitation limit but greater than zero.
P = The RPD between the results for the two columns exceeds the method-specified criteria.
I= The lower value for the two columns has been reported due to obvious interference.

Bold	= Result exceeds Unrestricted Use SCOs.
Bold	= Result exceeds Restricted Residential Use SCOs.
Bold	= Result exceeds Commercial Use SCOs.

TABLE 6

SUMMARY OF REMEDIAL INVESTIGATION GROUNDWATER ANALYTICAL RESULTS

REMEDIAL INVESTIGATION / INTERIM REMEDIAL MEASURES / ALTERNATIVE ANALYSIS REPORT

402 AND 430 BUFFALO AVENUE SITE

NIAGARA FALLS, NEW YORK

Parameters [1]	Class GA GWQS [2]	Sample Location										
		MW-1	MW-2*	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7	MW-8	MW-9	MW-10
		4/16/15		5/1/15	4/16/15				6/4/15	4/16/15		
Volatile Organic Compounds (VOCs) - ug/L												
1,2,4-Trimethylbenzene	**5**	ND	--	ND	0.82 J	ND	**7.3**	ND	ND	ND	ND	**5.3**
1,3,5-Trimethylbenzene	**5**	ND	--	ND	2.2 J	ND	1 J	ND	ND	ND	ND	0.87 J
2-Butanone	**50**	2.9 J	--	ND	ND	ND	3.5 J	4.3 J	ND	3.3 J	2.8 J	ND
2-Hexanone	**50**	ND	--	ND	ND	ND	ND	1.2 J	ND	1.1 J	1.1 J	ND
Acetone	**50**	13	--	ND	4 J	ND	16	41	2.5 J	15	15	ND
Benzene	**1**	ND	--	0.44 J	**1.5**	ND	0.81	0.19 J	0.17 J	0.61	ND	ND
Carbon disulfide	**--**	2.3 J	--	1.9 J	ND	ND	1.6 J	1.7 J	2.6 J	3.1 J	1.3 J	ND
Chloroform	**7**	ND	--	ND	ND	ND	ND	ND	ND	6.2	6.3	ND
Cyclohexane	**--**	ND	--	1.7 J	2.4 J	ND	0.48 J	ND	ND	ND	ND	0.63 J
Ethylbenzene	**5**	ND	--	ND	ND	ND	1.5 J	ND	ND	ND	ND	ND
Isopropylbenzene	**5**	ND	--	ND	ND	ND	1.5 J	ND	ND	ND	ND	3.3
Methylcyclohexane	**--**	ND	--	1.9 J	4 J	0.51 J	0.64 J	ND	ND	ND	ND	1.6 J
n-Propylbenzene	**5**	ND	--	ND	ND	ND	1.1 J	ND	ND	ND	ND	1.4 J
Xylene (total)	**5**	ND	--	1.64	4.9	ND	ND	ND	ND	1.4 J	ND	ND
sec-Butylbenzene	**5**	ND	--	ND	ND	ND	1.4 J	ND	ND	ND	ND	3.1
Tetrachloroethene	**5**	ND	--	ND	0.37 J	ND	ND	0.47 J	ND	0.23 J	ND	ND
Toluene	**5**	ND	--	1.2 J	4.5	ND	1.6 J	ND	ND	1.6 J	ND	ND
Trichloroethene	**5**	ND	--	ND	0.29 J	ND	ND	0.83	ND	1.6 J	ND	ND
Semivolatile Organic Compounds (SVOCs) - ug/L												
2-Methylnaphthalene	**--**	0.19 J	0.21	--	ND	ND	0.35 J	0.46	--	0.23	0.1 J	3.9
Acenaphthene	**20**	ND	ND	--	ND	ND	ND	0.32	--	ND	ND	1.4
Anthracene	**50**	ND	ND	--	ND	ND	ND	0.2	--	ND	ND	ND
Benzo(a)anthracene	**0.002**	**0.07 J**	ND	--	ND	ND	ND	**0.18 J**	--	ND	ND	ND
Benzo(a)pyrene	**ND**	**0.1 J**	ND	--	ND	ND	ND	**0.19 J**	--	ND	ND	ND
Benzo(b)fluoranthene	**0.002**	**0.2**	**0.08 J**	--	ND	ND	ND	**0.25**	--	ND	ND	ND
Benzo(ghi)perylene	**--**	0.09 J	ND	--	ND	ND	ND	0.12 J	--	ND	ND	ND
Benzo(k)fluoranthene	**0.002**	**0.08 J**	ND	--	ND	ND	ND	**0.09 J**	--	ND	ND	ND
Biphenyl	**5**	ND	ND	--	ND	ND	ND	ND	--	ND	ND	1 J
Bis(2-ethylhexyl) phthalate	**5**	ND	1.4 J	--	ND	ND	ND	ND	--	ND	ND	ND
Chrysene	**0.002**	**0.15 J**	**0.06 J**	--	ND	ND	ND	**0.17 J**	--	ND	ND	ND
Dibenzofuran	**--**	ND	ND	--	ND	ND	ND		--	ND	ND	1 J
Fluoranthene	**50**	0.44	0.16 J	--	ND	ND	ND	0.42	--	ND	ND	ND
Fluorene	**50**	0.07 J	0.07 J	--	ND	ND	0.31 J	0.34	--	0.11 J	ND	3.3
Indeno(1,2,3-cd)pyrene	**0.002**	**0.11 J**	ND	--	ND	ND	ND	**0.13 J**	--	ND	ND	ND
Naphthalene	**10**	ND	0.14 J	--	ND	ND	ND	1.4	--	0.12 J	ND	ND
Phenanthrene	**50**	0.4	0.3	--	ND	ND	0.24 J	0.66	--	0.46	0.16 J	0.81 J
Pyrene	**50**	0.31	0.12 J	--	ND	ND	ND	0.36	--	ND	ND	ND
Polychlorinated Biphenyls - ug/L												
Total PCBs	**0.09**	ND	ND	--	ND	ND	ND	ND	--	ND	ND	ND
Metals (Dissolved) - ug/L [3]												
Arsenic	**25**	0.85	0.8	--	0.65	0.21 J	1.27	1.84	--	2.89	ND	2.23
Barium	**1000**	17.03	10.4	--	32.57	123.8	57.82	13.93	--	17.03	32.43	354.4
Cadmium	**5**	0.11 J	0.1 J	--	0.37	0.07 J	0.07 J	ND	--	0.11 J	0.29	ND
Chromium	**50**	2.45	1.5	--	2.03	2.11	0.66 J	1.33	--	2.98	0.67 J	0.8 J
Copper	**200**	1.86	1.8	--	1.65	0.9 J	2.24	4.48	--	2.97	0.36 J	ND
Lead	**25**	ND	ND	--	23.76	0.57 J	0.34 J	**29.18**	--	ND	ND	ND
Manganese	**300**	247.8	**335.9**	--	103.1	7.59	**423.6**	**425.4**	--	28.9	**572.2**	**431.4**
Nickel	**100**	7.64	14.3	--	3.1	0.45 J	10.28	6.72	--	1.94	18.06	2.32
Selenium	**10**	1.56 J	2 J	--	3.92 J	2.44 J	5	2.36 J	--	ND	5.15	ND
Zinc	**2000**	33.63	27.4	--	119.3	39.68	25.55	86.07	--	17.26	28.88	6.83 J
Pesticides and Herbicides - ug/L												
4,4'-DDD	**0.3**	ND	ND	--	ND	ND	ND	0.037 J	--	ND	ND	ND
4,4'-DDE	**0.2**	ND	ND	--	ND	ND	ND	0.076	--	ND	ND	ND
4,4'-DDT	**0.2**	ND	ND	--	ND	ND	ND	0.165	--	ND	ND	ND
Chlordane	**0.05**	ND	ND	--	ND	ND	ND	**0.528 P,I**	--	ND	ND	ND
cis-Chlordane	**--**	ND	ND	--	ND	ND	ND	0.033 P,I	--	ND	ND	ND
Heptachlor epoxide	**0.03**	ND	ND	--	ND	ND	ND	0.008	--	ND	ND	ND
trans-Chlordane	**--**	ND	ND	--	ND	ND	ND	0.019 J,P,I	--	ND	ND	ND

Notes:

1. Only parameters detected at a minimum of one sample location are presented in this table; all other compounds were reported as non-detect.
2. Values per NYSDEC TOGS 1.1.1 Class GA Groundwater Quality Standards.
3. Sample results were reported by the laboratory in mg/L and converted to ug/L for comparisons to GWQSs

* = Suspect Groundwater Analytical Results, resampled on 05/01/15.

Qualifiers:

ND = Parameter not detected above laboratory detection limit.
"--" = Sample not analyzed for parameter or no GWQS available for the parameter.
J = Estimated Value - Below calibration range
P = The dual column RPD's are above the acceptance criteria, the lower of the two results is reported.
I = The lower value for the two columns has been reported due to obvious interference.

BOLD = Result exceeds GWQS.

TABLE 7

SUMMARY OF TRANSFORMER ROOM IRM POST-EXCAVATION SOIL ANALYTICAL RESULTS

REMEDIAL INVESTIGATION / INTERIM REMEDIAL MEASURES / ALTERNATIVE ANALYSIS REPORT

402 AND 430 BUFFALO AVENUE SITE

NIAGARA FALLS, NEW YORK

PARAMETER[1]	Unrestricted Use SCOs[2]	Restricted Residential Use SCOs [2]	Commercial Use SCOs[2]	SAMPLE LOCATION								
				A-1 (1')	B-1 (1')	C-1 (1')	D-1 (1')	E-1 (1')	F-1 (1')	G-2 (2')	H-2 (2')	Pipe Sediment
				7/22/2015						7/24/2015		7/23/2015
Polychlorinated biphenyls (PCBs) - mg/Kg [3]												
Aroclor 1254	--	--	--	ND	ND	ND	ND	ND	ND	ND	ND	0.208
Aroclor 1260	--	--	--	0.0477	0.632	0.00653 J	0.317	0.07	0.0208 J	0.0245 J	ND	0.266
Total PCBs	**0.1**	**1**	**1**	0.0477	**0.632**	0.00653	**0.317**	0.07	0.0208	0.0245	ND	**0.474**

Notes:

1. Only those parameters detected at a minimum of one sample location are presented in this table; all other compounds were reported as non-detect.
2. Values per 6NYCRR Part 375 Soil Cleanup Objectives (SCOs).
3. Sample results were reported by the laboratory in ug/kg and converted to mg/kg for comparisons to SCOs.

Definitions:

ND = Parameter not detected above laboratory detection limit.
"--" = No value available for the parameter.
J = Estimated value; result is less than the sample quantitation limit but greater than zero.

Bold	= Result exceeds Unrestricted Use SCOs.
Bold	= Result exceeds Restricted Residential Use SCOs.
Bold	= Result exceeds Commercial Use SCOs.

TABLE 8

SUMMARY OF TRANSFORMER ROOM IRM POST-REMEDIAL PCB WIPE SAMPLE RESULTS

REMEDIAL INVESTIGATION/INTERIM REMEDIAL MEASURES/ALTERNATIVE ANALYSIS REPORT

402 and 430 BUFFALO AVENUE SITE

NIAGARA FALLS, NEW YORK

Parameter[1]	South Wall Wipe	South Footer Wipe	West Wall Wipe	West Footer Wipe
	7/23/2015			
Polychlorinated biphenyls (PCBs) - ug/Abs				
Aroclor 1016	ND	ND	ND	ND
Aroclor 1221	ND	ND	ND	ND
Aroclor 1232	ND	ND	ND	ND
Aroclor 1242	ND	ND	ND	ND
Aroclor 1248	ND	ND	ND	ND
Aroclor 1254	ND	ND	ND	ND
Aroclor 1260	ND	1.24	ND	0.921
Aroclor 1262	ND	ND	ND	ND
Aroclor 1268	ND	ND	ND	ND
Total PCBs	ND	1.24	ND	0.921

Notes:

1. Sample results were reported by the laboratory in ug Abs; equivalent to ug/100 cm^2.

Definitions:

ND = Parameter not detected above laboratory detection limit.

TABLE 9

SUMMARY OF PETROLEUM AREA IRM AREA POST-EXCAVATION CONFIRMATORY SOIL ANALYTICAL RESULTS

REMEDIAL INVESTIGATION / INTERIM REMEDIAL MEASURES / ALTERNATIVE ANALYSIS REPORT

402 AND 430 BUFFALO AVENUE SITE

NIAGARA FALLS, NEW YORK

PARAMETER[1]	Unrestricted Use SCOs [2]	Restricted Residential Use SCOs [2]	Commercial Use SCOs [2]	Sample Location		
				Petroleum Area East	Petroleum Area Middle	Petroleum Area West
				4/14/2015		
Volatile Organic Compounds (VOCs) - mg/Kg [3]						
2-Butanone (MEK)	**0.12**	**100**	**500**	ND	0.0056 J	ND
4-methyl-2-pentanone (MIBK)	**--**	**--**	**--**	ND	0.00094 J	0.0024 J
Acetone	**0.05**	**100**	**500**	ND	0.0097 J	ND
Tetrachloroethene	**1.3**	**19**	**150**	0.00027 J	ND	ND
Semi-Volatile Organic Compounds (SVOCs) - mg/Kg [3]						
Bis(2-ethylhexyl) phthalate	**--**	**--**	**--**	0.048 J	ND	ND
Total PAHs	--	--	**500**	0.048	--	--

Notes:

1. Only those parameters detected at a minimum of one sample location are presented in this table; all other compounds were reported as non-detect.
2. Values per 6NYCRR Part 375 Soil Cleanup Objectives (SCOs).
3. Sample results were reported by the laboratory in ug/kg and converted to mg/kg for comparisons to SCOs.

Definitions:

ND = Parameter not detected above laboratory detection limit.
"--" = No value available for the parameter; Parameter not analysed for.
J = Estimated value; result is less than the sample quantitation limit but greater than zero.

Bold	= Result exceeds Unrestricted Use SCOs.
Bold	= Result exceeds Restricted Residential Use SCOs.
Bold	= Result exceeds Commercial Use SCOs.

TABLE 10

SUMMARY OF 401 BUFFALO AVENUE IRM POST EXCAVATION SOIL SAMPLING RESULTS

REMEDIAL INVESTIGATION / INTERIM REMEDIAL MEASURES / ALTERNATIVE ANALYSIS REPORT

402 AND 430 BUFFALO AVENUE SITE

NIAGARA FALLS, NEW YORK

PARAMETER[1]	Unrestricted Use SCOs [2]	Restricted Residential Use SCOs [2]	401 Buffalo Avenue IRM Excavation Areas - Sample Location										
			Parking Lot Island Area Bottom-Comp 1	Parking Lot Island Area Bottom-Comp 2	Parking Lot Island Area Bottom-Comp 3	Parking Lot Island Area Bottom-Comp 4	Pool Area North Wall	Pool Area South Wall	Pool Area East Wall	Pool Area West Wall	Pool Area Bottom	Southern Gas Line Comp	SS-2 Area Comp.
			6/3/2015				6/4/2015						6/4/2015
Semi-Volatile Organic Compounds (SVOCs) - mg/Kg [3]													
2-Methylnaphthalene	--	--	--	--	--	--	--	--	--	--	--	0.24	--
Acenaphthene	**20**	**100**	--	--	--	--	--	--	--	--	--	0.046 J	--
Anthracene	**100**	**100**	--	--	--	--	--	--	--	--	--	0.035 J	--
Benzo(a)anthracene	**1**	**1**	--	--	--	--	--	--	--	--	--	0.1 J	--
Benzo(a)pyrene	**1**	**1**	--	--	--	--	--	--	--	--	--	0.075 J	--
Benzo(b)fluoranthene	**1**	**1**	--	--	--	--	--	--	--	--	--	0.11 J	--
Benzo(ghi)perylene	**100**	**100**	--	--	--	--	--	--	--	--	--	0.049 J	--
Chrysene	**1**	**3.9**	--	--	--	--	--	--	--	--	--	0.18	--
Dibenzofuran	**7**	**59**	--	--	--	--	--	--	--	--	--	0.079 J	--
Fluoranthene	**100**	**100**	--	--	--	--	--	--	--	--	--	0.16	--
Naphthalene	**12**	**100**	--	--	--	--	--	--	--	--	--	0.17 J	--
Phenanthrene	**100**	**100**	--	--	--	--	--	--	--	--	--	0.34	--
Pyrene	**100**	**100**	--	--	--	--	--	--	--	--	--	0.17	--
Total PAHs	--	--	--	--	--	--	--	--	--	--	--	1.754	--
Metals - mg/Kg													
Arsenic	**13**	**16**	1.8	3.2	1.4	2.8	2.4	1.9	1.6	0.77	2.1	9.2	2.5
Barium	**350**	**400**	31	18	42	40	22	30	13	11	24	71	24
Beryllium	**7.2**	**72**	0.21 J	0.18 J	0.27	0.1 J	0.2 J	0.22 J	0.14 J	0.1 J	0.15 J	0.37	0.2 J
Cadmium	**2.5**	**4.3**	ND	ND	ND	ND	ND	ND	ND	0.08 J	0.04 J	ND	ND
Chromium	**30**	**180**	6.2	5.2	5.9	3.1	5.8	6.3	4.6	3.1	4.3	4.8	5.5
Copper	**50**	**270**	8.8	9.6	6.7	6.9	7.1	7	5.1	3.4	6	39	6.2
Lead	**63**	**400**	24	1.7 J	33	60	3.2	5.1	2 J	22	22	22	6.3
Manganese	**1600**	**2000**	380	150	600	260	280	290	290	240	340	94	270
Mercury	**0.18**	**0.81**	0.08	0.08	0.16	0.12	0.077 J	0.09 J	0.068 J	0.08	0.1	**0.21**	0.03
Nickel	**30**	**310**	6.8	8.4	5.4	3.4	7.4	7.2	5.8	2.8	4.6	8.1	5.6
Silver	**2**	**180**	ND	ND	0.16 J	0.08 J	ND	ND	ND	0.09 J	0.09 J	ND	ND
Selenium	--	--	ND	ND	ND	ND	ND	ND	ND	ND	0.14 J	0.39 J	ND
Zinc	**109**	**10000**	70	28	63	59	37	41	29	100	99	67	43 J

Notes:

1. Only those parameters detected at a minimum of one sample location are presented in this table; all other compounds were reported as non-detect.
2. Values per 6NYCRR Part 375 Soil Cleanup Objectives (SCOs).
3. Sample results were reported by the laboratory in ug/kg and converted to mg/kg for comparisons to SCOs.

Definitions:

ND = Parameter not detected above laboratory detection limit.
"--" = No value available for the parameter; Parameter not analyzed for.
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Bold	= Result exceeds Unrestricted Use SCOs.
Bold	= Result exceeds Restricted Residential Use SCOs.