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Final Engineering Report

402 & 430 Buffalo Avenue Site
BCP Site No. C932164
Niagara Falls, New York

Revised December 2015 0294-013-001

Prepared For:

Merani Hospitality, Inc.

Prepared By:

BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC

In Association With:

TURNKEY ENVIRONMENTAL RESTORATION, LLC

2558 Hamburg Turnpike, Suite 300, Buffalo, New York 14218 | phone: (716) 856-0599 | fax: (716) 856-0583

BROWNFIELD CLEANUP PROGRAM

FINAL ENGINEERING REPORT

402 and 430 BUFFALO AVENUE SITE
NYSDEC SITE NUMBER: C932164
NIAGARA FALLS, NEW YORK

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Prepared for:

Merani Hospitality, Inc.7001 Buffalo Avenue
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CERTIFICATION

I, Thomas H. Forbes, P.E. am currently a registered professional engineer licensed by the State of New York, I had primary direct responsibility for implementation of the remedial program activities, and I certify that the Interim Remedial Measures Work Plan, and Addendum to the IRM Work Plan were implemented and that all construction activities were completed in substantial conformance with the Department-approved IRM Work Plans.

I certify that the data submitted to the Department with this revised December 2015 Final Engineering Report for the 402 and 430 Buffalo Avenue Site demonstrates that the remediation requirements set forth in the Work Plans and in all applicable statutes and regulations have been or will be achieved in accordance with the time frames, if any, established in for the remedy.

I certify that all use restrictions, Institutional Controls, Engineering Controls, and/or any operation and maintenance requirements applicable to the Site are contained in an environmental easement created and recorded pursuant ECL 71-3605 and that all affected local governments, as defined in ECL 71-3603, have been notified that such easement has been recorded.

I certify that a Site Management Plan has been submitted for the continual and proper operation, maintenance, and monitoring of all Engineering Controls employed at the Site, including the proper maintenance of all remaining monitoring wells, and that such plan has been approved by Department.

I certify that all documents generated in support of this report have been submitted in accordance with the DER's electronic submission protocols and have been accepted by the Department.

I certify that all data generated in support of this report have been submitted in accordance with the Department's electronic data deliverable and have been accepted by the Department.

I certify that all information and statements in this certification form are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law. I, Thomas H. Forbes, of Benchmark Environmental Engineering and Science, PLLC, am certifying as Owner's Designated Site Representative for Merani Hospitality, Inc. for the site.

DATE: 12-17-15

FINAL ENGINEERING REPORT
402 and 430 BUFFALO AVENUE SITE

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1.0 BACKGROUND AND SITE DESCRIPTION

Merani Hospitality, Inc. (Merani) entered into a Brownfield Cleanup Agreement (BCA) with the New York State Department of Environmental Conservation (NYSDEC) in August 2014, which was amended in November 2014, to investigate and remediate a 6.2-acre property located in City of Niagara Falls, New York. The property was remediated to Restricted Residential use, and will be used as a hotel facility (401 Buffalo Avenue) and planned future residential and/or commercial development (402 and 430 Buffalo Avenue).

1.1 Site Description

The Site is comprised of three (3) adjoining parcels totaling 6.2 acres, located in a highly developed mixed use commercial and residential area of Niagara Falls. The BCP Site includes:

- **401 Buffalo Avenue, S.B.L. # 159.13-2-9, 3.8 acres**
- **402 Buffalo Avenue, S.B.L. # 159.54-1-46, 0.35 acres**
- **430 Buffalo Avenue, S.B.L. # 159.54-1-45, 2.05 acres**

The approximate 6.2 acre Site is bounded by 4th Street to the west, 6th Street and Holly Place to the east, a public alleyway from 4th Street to 6th Street to the north, and the Robert Moses State Parkway lands to the south (see Figures 1 and 2). The boundaries of the Site are more fully described in the Environmental Easement, included in Appendix A. An electronic copy of this FER with all supporting documentation is included as Appendix B.

Historically, the southern portion of the Site, encompassing the 401 Buffalo Avenue parcel, included a vacant municipally-condemned former hotel and conference center (i.e., Fallside Hotel), parking areas and vegetated/landscaped areas. The northern portion of the Site, 402 and 430 Buffalo Avenue parcels, are currently vacant, though historically were part of the manufacturing facility owned and operated by National Biscuit Co./Shredded Wheat Company.

1.2 Physical Setting

1.2.1 Land Use

The BCP Site consists of three (3) parcels, including: 401 Buffalo Avenue on the southern portion of the Site, and 402 and 430 Buffalo Avenue on the northern portion of the Site. The Site was historically used for mixed purposes, with a former hotel and conference center occupying the 401 Buffalo Avenue parcel and commercial-industrial use on the 402 and 430 Buffalo Avenue parcels. The Site is currently zoned for R-3 Multi-family and R4 – Heritage by the City of Niagara Falls Zoning Map. The southern portion of the Site, 401 Buffalo Avenue, is currently being redeveloped with a new hotel complex, and the 402 and 430 Buffalo Avenue parcels are currently vacant (see Figure 2). The properties adjoining the Site and in the neighborhood surrounding the Site primarily include mixed use commercial and residential areas of the City of Niagara Falls.

The Site is surrounded by commercial and residential properties to the north, Robert Moses Parkway to the south with the Niagara River beyond, residential properties are located adjacent to the site to the east across Holly Place, and to the west across 4th Street (see Figure 2).

1.2.2 Geology

The U.S. Department of Agriculture (USDA), Soil Conservation Service soil survey map of Niagara County, shows the Site is located within an un-surveyed area. Based on the Remedial Investigation (RI), overburden soils on the 401 and 402 Buffalo Avenue parcels generally consist of sandy lean clay, with fill noted to depths of up to 8 fbgs in select locations. The 430 Buffalo Avenue parcel overburden is generally described as fill material, ranging to depths of 7 fbgs (former concrete slab ranging from 3 to 7 fbgs), with varying amounts of sand and silty clay.

Based on the bedrock geologic map of Niagara County New York, the Niagara Falls region is underlain by Silurian and Devonian age stratified limestone, dolomite, and shale of marine origin. The bedrock is virtually flat lying, with a gentle dip to the south of only about 30 to 40 feet per mile and exhibits only very gentle folding.

During the RI, boring refusal (assumed bedrock) was encountered between 10 fbgs and greater than 18 fbgs (extent of RI investigation). Based on a 2013 Empire Geo-Services,

Inc. (Empire) geotechnical report completed on the 401 Buffalo Avenue parcel, bedrock was encountered between 9.8 and 28.3 fbgs.

1.2.3 Hydrogeology

The Site is located approximately 500 feet north of the Niagara River, and less than 0.5-miles from Niagara Falls. Based on the findings of the RI, overburden groundwater was encountered at depths ranging from five (5) to greater than 11 fbgs, with the exception of MW-7 which was dry. The Site hydrogeology is complicated by the presence of municipal subgrade utilities surrounding the Site, particularly along Buffalo Avenue that intersects the Site, and the presence of the elevated Robert Moses Parkway to the south. In general, localized groundwater flow was estimated to flow in a southern direction toward the Niagara River. Figure 3 depicts the estimated overburden groundwater isopotential map based on the water level measurements collected in April 2015.

1.3 Environmental History

1.3.1 November 2013 and December 2013 Limited and Supplemental Phase II Environmental Investigations

TurnKey completed a Limited Phase II Subsurface Environmental Investigation on the 401, 402, & 430 Buffalo Avenue Site, and the findings are summarized below:

- NYSDEC Spill No. 1312160 was assigned to the Site related to the vandalism/destruction of electrical transformers;
- Visual evidence of similar historic subsurface fill materials across the Site on both the north and south sides of Buffalo Avenue;
- Elevated polycyclic aromatic hydrocarbons (PAHs) above Part 375 Unrestricted, Restricted-Residential and Commercial Use SCOs;
- Elevated metals, including barium and lead, above the Part 375 Unrestricted, Restricted-Residential and Commercial Use SCOs;
- Oil-containing former hotel operation equipment in the basement, including compressors, elevator equipment, and transformers;

- Presence of hazardous chemicals, including corrosive boiler chemicals, solvents, lubricants, degreasers, paints, thinners, hydraulic oils and maintenance equipment fuels, pesticides and herbicides, pool and water treatment chemicals;
- Universal and e-waste throughout the building.

1.3.2 September 2014 – 401 Buffalo Avenue Supplemental Investigation

TurnKey completed a pre-demolition supplemental investigation at the 401 Buffalo Avenue parcel and the findings are summarized below:

- Elevated PAHs above Part 375 Unrestricted, Restricted-Residential and/or Commercial Use SCOs were detected on-Site.
- Elevated metals above Part 375 Unrestricted, Restricted Residential, and/or Commercial Use SCOs were detected on-Site.
- Based on the radiological screening results, elevated radiologic material (slag) is present on Site.

1.3.3 BCP Remedial Investigation (RI)

A remedial investigation (RI) was performed at the Site in accordance with the approved RI-AA Work Plan (November 2014). The purpose of the investigation was to more fully define the nature and extent of contamination on the BCP Site, and to collect data of sufficient quantity and quality to perform the remedial alternatives evaluation. The field investigations were completed across the BCP Site to delineate areas requiring remediation. On-Site field activities included surface and subsurface soil sampling, PCB wipe samples, a site-wide gamma walkover, monitoring well installation, groundwater sampling, and collection of hydrogeologic data. Below is a summary of RI findings.

1.3.3.1 Transformer Room - PCB Investigation Results

Three (3) PCB wipe samples were collected, including two (2) floor wipe samples, identified as Wipe Sample 1 and Wipe Sample 2, and one (1) interior cavity transformer housing sample, identified as Housing 103. Analytical results indicate that the transformer oil was PCB-containing. Analytical results are reported by the laboratory as microgram-absolute (ug/Abs), with results being representative of a 100 centimeters square (cm-sq.) wipe sampling area; therefore, samples results are ug/100 cm-sq. Conversion of the wipe sample results to milligrams per kilogram (mg/Kg), or parts-per-million (ppm), is provided

in 40CFR761; whereby wipe samples results less than 10 ug/100 cm-sq. is equivalent to less than 50 ppm, sample results between 10-100 ug/100 cm-sq. is equivalent to greater than 50 ppm and less than 500 ppm, and values greater than 100 ug/100 cm-sq. is equivalent to greater than 500 ppm. The equivalent regulatory value for Wipe Sample 1 is between 50 and 500 ppm, with Wipe Sample 2 and Housing 103 sample results indicating a value of greater than 500 ppm equivalents. Based on the analytical results, the NYSDEC and the National Response Hotline was notified of the spill.

1.3.3.2 Site-Wide Gamma Walkover

Radiologic field screening was completed during the RI by licensed radiologic subcontractor across the entire BCP Site. Several areas of elevated readings above site background of 6,000-8,000 counts per minute (CPM) were identified on both the northern (402 Buffalo Avenue) and southern (401 Buffalo Avenue) portions of the Site during the pre-demolition gamma walkover.

An area beneath the asphalt lot on 402 Buffalo Avenue was identified to have elevated readings ranging from 20,000 to 45,000 cpm. Several locations were identified on the 401 Buffalo Avenue parcel to be slightly above background, ranging from 10,000-20,000 cpm, in addition to the previously identified pool area (see Figure 4).

1.3.3.3 Soil/Fill Investigation Results

A total of seven (7) surface soil samples, and 32 subsurface soil samples were advanced across the Site (see Figure 4).

- Based on the surface soil data, no SVOCs, PCBs, pesticides or herbicides were detected above Restricted-Residential SCOs (RRSCOs), with the vast majority being reported as non-detect or estimated values by the laboratory. RI results identified only arsenic, slightly above its RRSCO at SS-2.
- Based on the subsurface soil data, no VOCs, PCBs, pesticides or herbicides were detected above Unrestricted Use SCOs (USCOs). Certain PAHs and metals were detected above their respective RRSCOs. Lead was detected above its Industrial Use SCO in TP-3, located on the 430 Buffalo Avenue parcel.

1.3.3.4 Groundwater Investigation Results

A total of ten (10) groundwater monitoring wells were installed across the BCP Site (Figure 3).

- Based on the groundwater data, no PCBs or herbicides were detected above GWQS. Certain VOCs, PAHs, metals and pesticides were detected slightly above their GWQS.

1.3.3.5 Off-site Soil/Fill Sample Results

During installation of the northern boundary of the cover system on 430 Buffalo Avenue, four (4) subsurface samples were collected at the request of the Department to assess potential off-site conditions. Analytical results indicate elevated PAHs exceeding Commercial Use SCOs (CSCOs), however total PAHs were less than or equal to 100 ppm. Elevated metals above USCOS, RRSCOS, and CSCOs, were detected (see Table 1). It should be noted these samples were collected at the northern property boundary along the alley (430 Buffalo Avenue parcel), and that adjacent on-Site soils are beneath the cover system.

Details of the remedial measures are provided in below.

2.0 SUMMARY OF SITE REMEDY

2.1 Remedial Action Objectives

Based on the results of the Remedial Investigation, the following Remedial Action Objectives (RAOs) were identified for the 402 and 430 Buffalo Avenue Site.

2.1.1 Soil RAOs

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.

2.1.2 Groundwater RAOs

RAOs for Public Health Protection

- Prevent ingestion of groundwater containing contaminant levels exceeding drinking water standards.

RAOs for Environmental Protection

- Prevent the discharge of contaminants to surface water.
- Remove the source of ground or surface water contamination.

In general, remedial activities included: excavation and off-site disposal of soil/fill exceeding RRSCOs; excavation and disposal of elevated radiologic materials; removal of PCB-contamination; construction of cover system; and, implementation of a Site Management Plan. Details of the remedial action are presented in the following sections.

2.2 Description of selected remedy

The site was remediated in accordance with the approved IRM Work Plan and addendum and the remedy selected by the NYSDEC in the Decision Document dated December 2015.

The factors considered during the selection of the remedy are those listed in 6NYCRR 375-1.8. The following are the components of the selected remedy:

1. Completion of Interim Remedial Measures, including excavation and off-site disposal of soil/fill exceeding RRSCOs;
2. Excavation and off-Site disposal of elevated radiologic material;
3. Removal and off-Site disposal of PCB-impacted materials identified in the transformer room;
4. Construction and maintenance of a soil cover system on the 430 Buffalo Avenue parcel consisting of a minimum of 24 inches of approved soil placed above an orange plastic demarcation fabric to prevent human exposure to remaining contaminated soil/fill above RRSCOs remaining at the site;
5. Execution and recording of an Environmental Easement to restrict land use and prevent future exposure to any contamination remaining at the site.
6. Development and implementation of a Site Management Plan (SMP) for post-certificate of completion (COC) operation, maintenance and monitoring.
7. Periodic certification of the institutional and engineering controls listed above.

3.0 INTERIM REMEDIAL MEASURES

Benchmark Environmental Engineering & Science, PLLC, in association with TurnKey Environmental Restoration, LLC implemented IRM activities in accordance with the NYSDEC-approved 401 Buffalo Avenue IRM Work Plan (December 2014) and the Addendum to the IRM Work Plan (July 2015). Summary of the material removed from the Site is provided in Table 2.

Details of the completed IRM activities are summarized below.

3.1.1 401 Buffalo Avenue – Interim Remedial Measures

- Demolition of the former 3-story section of the hotel, including asbestos abatement, universal and chemical waste removal.
- Chemical Waste - Collection and removal of chemical wastes, including: spent boiler treatment chemicals, cleaning and maintenance chemicals; used petroleum oils, oil-based paints; flammable waste aerosols; lead acid batteries (for recycling); and hydraulic oil from the elevators. Additional compressed gas cylinders fire extinguishers were recycled. Transportation and recycling/disposal was completed by Clean Harbors Environmental Services, Inc.
- Radiologic Material - Excavation and off-site transportation of 72.5 tons of radiologic material for disposal at Waste Management's (WM) Mahoning Landfill, located in New Springfield, Ohio.
- Petroleum Excavation – Excavation and off-site transportation of 41.5 tons of non-hazardous petroleum-impacted soil/fill by RE Lorenz (9A-799) for disposal at Modern Landfill, located in Model City, New York.
- Parking Lot Island Excavation – Excavation and off-site transportation of 454 tons of non-hazardous metal-impacted soil/fill by RE Lorenz for disposal at Modern Landfill located in Model City New York.
- Pool Area Excavation – Excavation and off-site disposal of 219 tons of non-hazardous metal-impacted soil/fill by RE Lorenz for disposal at Modern Landfill, located in Model City New York.

- SS-2 Excavation – Excavation and off-site disposal of 43.5 tons of non-hazardous metal impacted soil/fill by RE Lorenz for disposal at Modern Landfill, located in Model City New York.
- Transformer Room – 41.5 tons of hazardous PCB-impacted concrete and soil was directly loaded into lined roll-offs, covered, placarded, and transported by Tonawanda Tank to Chemical Waste Management, Inc. (CWM) Landfill, located in Model City, New York. Three (3) transformer housings and eight (8) drums of transformer windings were properly packaged, placarded, and transported off-site by Tonawanda Tank for disposal at CWM Model City Landfill, located in Model City, New York. Two (2) drums of PCB-impacted sorbent rags, spill pads and containment materials were properly packaged, placarded and transported off-site by Tonawanda Truck for disposal at CWM Model City Landfill, located in Model City, New York.

3.1.2 402 and 430 Buffalo Avenue Interim Remedial Measures

- 430 Buffalo Avenue - TP-3 Excavation Area – A total of 616 tons of non-hazardous lead-impacted soil/fill was excavated and transported off-site by RE Lorenz for disposal at Modern Landfill, located in Model City, New York.
- 402 Buffalo Avenue – Radiologic Activities – 1,180 tons of slag-fill containing elevated levels of technologically enhanced naturally occurring radioactive material (TENORM), primarily associated with the asphalt and subbase, was removed, temporarily stockpiled, loaded and transported off-site to Austin Master Services', licensed radiologic handling facility, located in Martins Ferry, Ohio, and trans-loaded for shipment and disposal at Energy Solutions licensed landfill, located in Clive, Utah. Post-removal radiologic screening was completed and confirmed that the remedial activities achieved site background levels

4.0 DESCRIPTION OF REMEDIAL ACTIONS PERFORMED

Remedial activities completed at the Site were conducted in accordance with the NYSDEC-approved 401 Buffalo Avenue IRM Work Plan (revised February 2015) and Addendum to the IRM Work Plan, (July 2015). All deviations from the work plans are noted below.

4.1 Governing Documents

4.1.1 Site Specific Health & Safety Plan (HASP)

All remedial work performed under this Remedial Action was in compliance with governmental requirements, including Site and worker safety requirements mandated by Federal OSHA.

The HASP was complied with during remedial work performed at the Site, and was included in Appendix C of the RI Work Plan.

4.1.2 Quality Assurance Project Plan (QAPP)

The QAPP was included as Section 4.0 of the Remedial Investigation Work Plan (November 2014) approved by the NYSDEC. The QAPP describes the specific policies, objectives, organization, functional activities and quality assurance/ quality control activities designed to achieve the project data quality objectives.

4.1.3 Soil/Fill Management Plan (SFMP)

A SFMP was included as Appendix B of the 401 Buffalo Avenue IRM Work Plan (rev February 2015). The SFMP described the specific procedures for managing soil/fill at the site, including excavation, stockpiling, off-site transportation, collecting analytical samples and backfill for the Site.

The SFMP was complied with during remedial intrusive activities performed at the Site.

4.1.4 Community Air Monitoring Plan (CAMP)

Real-time community air monitoring was performed during remedial activities at the Site. A Community Air Monitoring Plan (CAMP) was included with Benchmark/Turnkey's HASP. Particulate monitoring was performed during remedial activities in accordance with this plan. This CAMP is consistent with the requirements for community air monitoring at remediation sites as established by the NYSDOH and NYSDEC. Accordingly, it follows procedures and practices outlined under NYSDEC's DER-10 Appendix 1A (NYSDOH's Generic Community Air Monitoring Plan) and Appendix 1B (Fugitive Dust and Particulate Monitoring). CAMP results are discussed in section 4.2.5 below. CAMP data is included in Appendix C.

4.1.5 Citizens Participation Plan

NYSDEC has coordinated and led community relations throughout the course of the project. Benchmark-TurnKey has supported the NYSDEC's community relation activities, as necessary. A Citizen Participation (CP) Plan was prepared by Benchmark-TurnKey and approved by NYSDEC in November 2014. A copy of the CP Plan, as well as the remedial work plan, is available for public review at the NYSDEC Region 9 office and the Erie County Public Library, the designated document repository.

As required for BCP sites, copies of the BCP application, RI/AA Work Plan, including the HASP and CAMP, Citizen Participation Plan, IRM Work Plan, Addendum to the IRM Work Plan, and RI-IRM-AA Report, were provided to the Earl Brydges Building, Niagara Falls Library for public review.

Public Notice and Fact Sheets were prepared by the Department, and mailed, as requested, and distributed via the NYSDEC email listserv, in accordance with the Department's approved Citizen Participation distribution list. A summary of the project's fact sheets is presented below. Copies of the fact sheets issued to date are provided in Appendix D.

- March 2014 – Public Notice for BCP Application. Written comments were accepted from March 12, 2014 until April 11, 2014. No public comments were received.
- December 2014 – Remedial Investigation Work Plan and Notification of Building Demolition: Public Comment Period Announced. Written comments

were accepted from December 15, 2014 until January 14, 2015. No public comments were received.

- October 2015 – Report Recommends Cleanup of Brownfield Site Contamination.
- November 2015 – Remedy Proposed for Brownfield Site Contamination; Public Comment Period Announced. Written comments were accepted from November 5, 2015 until December 21, 2015. No public comments were received.

Following NYSDEC approval of the Final Engineering Report and issuance of the Certificate of Completion (COC), Fact Sheets will be prepared and distributed to announce that (1) remedial construction has been completed; and (2) that the COC has been issued.

4.2 Remedial Program Elements

The IRMs were completed by Merani Hospitality, Inc., and their designated contractors and subcontractors, with oversight provided by Benchmark-TurnKey. The work was completed in general accordance with 6NYCRR Part 375 and New York State Department of Environmental Conservation (NYSDEC) DER-10 guidelines and the approved IRM Work Plan and addendum.

4.2.1 Contractors and Consultants

- Benchmark Environmental Engineering & Science, PLLC (Benchmark) served as the Engineer of Record.
- TurnKey Environmental Restoration, LLC, in association with Benchmark, inspected the work as completed by the contractors, corresponded with the NYSDEC, and collected samples for analysis;
- Greater Radiological Dimensions, Inc. (GRD) completed on-Site radiologic field screening, provided radiologic disposal oversight, and provided on-site Radiologic Safety Training.
- Austin Master Services, LLC (AMS) completed on-Site radiologic field screening, provided radiologic excavation oversight, radiologic disposal management, and provided on-site Radiologic Safety Training.

- TREC Environmental Inc. provided drilling services related to the remedial investigation;
- RE Lorenz Construction completed investigation and remedial excavation, and off-site transportation services of non-hazardous soil/fill for disposal and asphalt recycling, and hauling of approved virgin-source backfill stone;
- Earth Dimensions, Inc. provided groundwater monitoring well drilling and installation services;
- Alpha Analytical Labs provided laboratory analytical services.
- Data Validation Services reviewed and validated analytical data packages.

4.2.2 Site Preparation

A Site meeting was held, in addition to routine meetings and correspondence, with NYSDEC, Merani Hospitality, LLC, and Benchmark/TurnKey, prior to the commencement of the remedial investigation and cleanup activities.

Documentation of NYSDEC and other agency approvals are included in Appendix E.

A NYSDEC-approved project sign was erected at the project entrance and remained in place during all phases of the Remedial Action.

4.2.3 General Site Controls

Permanent fencing is installed around the 401 Buffalo Avenue portion of the Site, with locked gates controlling access. A Site trailer is located on the 402 Buffalo Avenue parcel. Traffic cones and temporary security fencing (snow fending) was used during the project to identify work areas, and limit access to exclusion zone.

4.2.4 Nuisance controls

During excavation and off-site transportation activities, inspection and frequent cleaning of the exit/entrances to the Site was completed. Additionally, water was used to control dust on-Site, as needed.

No additional nuisance controls were required during remedial activities.

4.2.5 CAMP results

CAMP monitoring activities were completed during remedial excavation activities, in accordance with the approved air monitoring plan. All monitoring results conformed to the CAMP perimeter particulate (PM10) and the organic vapor (below 5 ppm) requirements with no exceedances of particulates or VOCs perimeter 15-minute average thresholds during the remedial work.

CAMP activities are detailed in the CAMP Summary Report and copies of CAMP field data sheets are provided electronically in Appendix C.

4.2.6 Reporting

NYSDEC, Merani Hospitality, and Benchmark/TurnKey had continual discussions, including on-Site meetings, electronic and telephone correspondence regarding progress throughout the entire remedial project.

Copies of daily field logs are included in Appendix F. A photo log of remedial activities is included in Appendix G.

4.3 Contaminated Materials Removal

Materials removed from the site included: building and demolitions debris; non-hazardous petroleum-, PAH- and metal-impacted soil/fill; universal and hazardous chemical waste; hazardous PCB-contaminated concrete, subbase and soil, transformers and windings, and sorbent material; and, elevated TENORM slag-fill material. Table 2 shows the total quantities of each category of material removed from the Site and the applicable transporters and disposal locations. Figures 5-7 present the locations of the IRM excavation activities, including end-point sample locations, as applicable. Disposal facility applications, approvals, load summaries, and disposal manifests are provided in Appendix H.

4.3.1 Building Demolition

Demolition of the 3-story building was completed by Total Wrecking from March through May 2015. Asbestos Containing Materials (ACM) contaminated demolition debris, including the west trench and south trench, was loaded into lined trailers, and shipped off-site for disposal at Hyland Landfill, located in Angelica New York, and/or loaded into lined

dumpsters and shipped to Waste Management's Chaffee Landfill, located in Chaffee, New York.

Washed concrete was transported off-site for recycling at Swift River – 47th Street C&D recycling facility (32W12), located in Niagara Falls, New York. Metal was transported off-site for recycling at Niagara Metals, located in Niagara Falls, New York.

4.3.2 Universal and Chemical Wastes

Chemical wastes from within the 3-story and 4-story sections of the building included flammable aerosols, lead acid batteries, mercury containing fluorescents lamps, petroleum oils, lubricants, oil-based paints, off-spec boiler treatment and commercial laundry chemicals, out-of-service fire extinguishers, and hydraulic oil from the elevators.

Chemical wastes were collected, properly decontaminated and cleared of potential ACM by 56 Services, Inc., segregated, appropriately containerized by waste category. On May 13, 2015, 27 drums/containers of properly labeled and placarded chemical wastes were transported off-site by Clean Harbors Environmental Services, Inc. for disposal/recycling at Clean Harbors El Dorado, LLC, located in El Dorado, Arkansas, Clean Harbors La Porte, LLC, located in La Porte Texas, and Spring Grove Resource Recovery, Inc., located in Spring Grove Ohio.

Table 2 shows the total quantities of each category of material removed from the site and the disposal/recycling locations. Approvals from disposal facilities are included in Appendix H1; load summaries are included in Appendix H2; and, manifests and/or bills of lading are included in electronic format in Appendix H3.

4.3.3 Radiologic TENORM Material

4.3.3.1 401 Buffalo Avenue – TENORM IRM

Prior to intrusive radiologic activities, GRD provided on-Site radiologic training to all personnel involved with the radiologic material removal, including Total Wrecking, Benchmark/TurnKey and NYSDEC staff on April 6, 2015.

On April 10th and 11th, 2015, Total Wrecking excavated areas of elevated radiologic material and stockpiled on the 401 Buffalo Avenue parcel, in accordance with the Radiologic

Work Plan. GRD completed pre-and post-removal radiologic screening and provided clearances of the excavation area, stockpile area, and excavation equipment.

On May 1, 2015, 72.5 tons of elevated radiologic material was loaded by Total Wrecking, and transported off-site by Tonawanda Tank Transport (9A-080/NYD097644801) for off-site disposal at WM's Mahoning Landfill, located in New Springfield, Ohio. GRD completed radiologic screening and clearances during loading activities.

Figure 5 presents the location of the radiologic material excavations. Approvals from disposal facilities are included in Appendix H1; load summaries are included in Appendix H2; and, manifests and/or bills of lading are included in electronic format in Appendix H3. Post-removal clearance screening documentation is included in Appendix J.

4.3.3.2 402 Buffalo Avenue – TENORM IRM

Prior to removal activities, AMS provided on-Site radiologic training for personnel involved with the remedial activities, including RE Lorenz and Benchmark/TurnKey staff on October 2, 2015.

Between October 5 and October 19th, 2015, 1,180 tons of TENORM slag-fill, primarily associated with the asphalt and subbase, was removed, temporarily stockpiled on-Site on poly sheeting, loaded and transported off-site by McCutcheon Enterprises, Inc. (PA-007) and D&V Trucking, Inc. (OH-168) to Austin Master Services', licensed radiologic facility (ODH0321907000; ODNR 2014-541), located in Martins Ferry, Ohio, and trans-loaded for shipment and disposal at Energy Solutions licensed landfill, located in Clive, Utah. Post-removal radiologic screening was completed, and confirmed that the remedial activities achieved site background levels (see Figure 8). Post-removal clearance screening documentation is included in Appendix J.

It should be noted that a small area of off-site elevated TENORM slag-fill (south of 401 Buffalo Avenue property boundary) was disturbed during removal of the on-Site asphalt parking lot located in the southwest corner of 401 Buffalo Avenue. AMS provided radiologic screening during asphalt removal, and segregated approximately 10 tons of elevated asphalt and slag-fill subbase. This elevated material was disposed of with the 402 Buffalo Avenue material documented above.

4.3.4 Petroleum Impacted Soil

During removal of subgrade footers/foundations of the former 3-story building, an area of petroleum-impacted soil/fill was identified. Petroleum-impacted soil/fill was excavated by Total Wrecking and temporarily stockpiled on-Site.

On June 3, 2015, RE Lorenz (9A-799) loaded 41.5 tons of petroleum-impacted soil/fill and transported off-site for disposal at Modern Landfill, located in Model City, New York.

Figure 5 shows the approximate lateral extent of the IRM excavations and the locations of the confirmatory samples collected. Table 2 shows the total quantities of each category of material removed from the site and the disposal/recycling locations. Table 3 summarizes the post-excavation end-point sample results. Approvals from disposal facilities are included in Appendix H1; load summaries are included in Appendix H2; and, manifests and/or bills of lading are included in electronic format in Appendix H3.

4.3.5 Parking Lot Island Area - Metal-Impacted Soil/Fill

On June 3rd 2015, approximately 454 tons of non-hazardous metals impacted soil/fill was excavated and transported off-site by RE Lorenz (9A-799) for disposal at Modern Landfill, located in Model City, New York.

Figure 5 shows the approximate lateral extent of the IRM excavations and the locations of the confirmatory samples collected. Table 2 shows the total quantities of each category of material removed from the site and the disposal/recycling locations. Table 4 summarizes the post-excavation end-point sample results. Approvals from disposal facilities are included in Appendix H1; load summaries are included in Appendix H2; and, manifests and/or bills of lading are included in electronic format in Appendix H3.

4.3.6 Pool Area – Metal-Impacted Soil/Fill

On June 3rd and 4th, 2015, approximately 219 tons of non-hazardous metal impacted soil/fill was excavated from beneath the former pool area and transported off-site by RE Lorenz (9A-799) for disposal at Modern Landfill, located in Model City, New York.

Figure 5 shows the approximate lateral extent of the IRM excavations and the locations of the confirmatory samples collected. Table 2 shows the total quantities of each category of material removed from the site and the disposal/recycling locations. Table 4

summarizes the post-excavation end-point sample results. Approvals from disposal facilities are included in Appendix H1; load summaries are included in Appendix H2; and, manifests and/or bills of lading are included in electronic format in Appendix H3.

4.3.7 SS-2 Area - Metal-Impacted Soil

After completion of the Pool Area excavation, Merani, in consultation with the Department, elected to address shallow metals impacted surface soil identified at SS-2. In total, 43.5 tons of non-hazardous metal impacted soil/fill was excavated and transported off-site by RE Lorenz (9A-799) for disposal at Modern Landfill, located in Model City, New York.

Figure 5 shows the approximate lateral extent of the IRM excavations and the locations of the confirmatory samples collected. Table 2 shows the total quantities of each category of material removed from the site and the disposal/recycling locations. Table 4 summarizes the post-excavation end-point sample results. Approvals from disposal facilities are included in Appendix H1; load summaries are included in Appendix H2; and, manifests and/or bills of lading are included in electronic format in Appendix H3.

4.3.8 Transformer Room PCB IRM Activities

On July 16, 2015, Total Wrecking installed decontamination/containment enclosures in preparation for PCB-remedial activities, including double layer plastic sheeting installed on the floor to cover ingress/egress route for material and equipment. Between July 16th and July 27, 2015, Total Wrecking removed and packaged three (3) transformer housings, eight (8) 55-gallon drums of transformer inner-windings, and two (2) 55-gallon drums of PCB-contaminated sorbent materials; and, excavated 41.5 tons of hazardous PCB-impacted concrete (block and slab), subbase and underlying soil/fill. Material was placed in lined roll-offs, covered, placarded, and transported off-site by Tonawanda Tank transport Services, Inc. (NYD097644801) for disposal at Chemical Waste Management (CWM) landfill (NYD049836679) permitted-landfill located in Model City, New York.

Figure 6 shows the approximate lateral extent of the IRM excavations and the locations of the confirmatory samples collected. Table 2 shows the total quantities of each category of material removed from the site and the disposal/recycling locations. Table 5 summarizes the post-excavation end-point sample results and Table 6 summarizes the post-

remedial wipe sample results. Approvals from disposal facilities are included in Appendix H1; load summaries are included in Appendix H2; and, manifests and/or bills of lading are included in electronic format in Appendix H3.

4.3.9 430 Buffalo Avenue - TP-3 Area - Metal-Impacted Soil/Fill

On August 10, 2015, 616 tons of non-hazardous lead-impacted soil/fill was excavated and transported off-site by RE Lorenz (9A-799) for disposal at Modern Landfill, located in Model City New York.

Figure 7 shows the approximate lateral extent of the TP-3 IRM excavation and the locations of the confirmatory samples collected. Table 2 shows the total quantities of each category of material removed from the site and the disposal/recycling locations. Table 7 summarizes the post-excavation end-point sample results. Approvals from disposal facilities are included in Appendix H1; load summaries are included in Appendix H2; and, manifests and/or bills of lading are included in electronic format in Appendix H3.

4.3.10 Petroleum Impacted Asphalt (Spill 1504828)

Two (2) areas of petroleum-stained asphalt were evident in the southwest parking lot. One area was related to Spill 15004828, and the other of unknown source. In consultation with the Department to address the spill, it was agreed that the two (2) areas would be removed and disposed off-site. Additionally, suspect petroleum-odors were field identified by the geotechnical drillers (SJB) during advancement of boring F5, also located in the southwest parking lot. Spoils from the F5 geotechnical boring were inspected, but did not exhibit visual evidence of impacts or elevated PID readings. It was determined by Merani, in consultation with the Department that spoils from the F5 caisson drilling would be segregated, and disposed off-site with the stained asphalt patches.

In total 41.5 tons of petroleum stained asphalt, related to Spill 1504828 spoils from the F5 caisson drilling, were loaded and transported off-site by RE Lorenz (9A-799) for disposal at Modern Landfill, located in Model City New York.

Approvals from disposal facilities are included in Appendix H1; load summaries are included in Appendix H2; and, manifests and/or bills of lading are included in electronic format in Appendix H3.

4.3.11 Excess Excavated Soil/Fill

Though not a component of the remedial measures, excess soil/fill generated during redevelopment activities, including excavations for subgrade utilities, site paving and grading activities, that was structurally unsuitable for on-Site reuse due to the presence of brick, block, and large limestone cobbles was removed from the Site.

Excess soil/fill removed from the Site include:

- Approximately 1,040 tons of excess soil/fill that was unable to be reused on-Site, was excavated during redevelopment activities by Anastasi, and transported off-site by RE Lorenz for disposal at Modern Landfill, located in Model City, New York.

Approvals from disposal facilities are included in Appendix H1; load summaries are included in Appendix H2; and, manifests and/or bills of lading are included in electronic format in Appendix H3.

4.3.12 Off-site Asphalt and Concrete Recycling

Though not a component of the remedial measures, non-impacted asphalt and concrete removed during the redevelopment activities was segregated and screened by GRD and/or Austin Masters Services (AMS) to confirm absence of elevated radioactivity prior to off-site transportation and recycling by Anastasi.

In total, 30 loads of asphalt and concrete were transported off-site by Anastasi for recycling at Swift River, registered C&D recycling facility (32W12) located in Niagara Falls, New York.

4.4 Remedial Performance/Documentation Sampling

Between April and September, 2015 remedial activities were completed across the Site. After completion of remedial measures, confirmatory samples were collected to verify achievement of remedial goals.

Regarding 401 Buffalo Avenue remedial activities, a total 28 confirmatory samples were collected, including: three (3) bottom soil samples from the shallow petroleum-impacted area excavation; four (4) composite soil samples from the shallow island parking lot excavation; four (4) sidewall samples and one (1) bottom sample from the pool area

excavation; one (1) composite soil sample for the shallow SS-2 excavation area; and eight (8) soil samples, one (1) pipe contents soil sample, and four (4) post-remedial wipe samples from the PCB area. All post-remedial sample results were below Residential Use SCOs. End-point confirmatory sample results are summarized on Tables 3-6. Locations of the IRM activities and confirmation sample locations are presented on Figures 5 and 6.

Regarding 430 Buffalo Avenue remedial activities, a total of ten (10) post-excavation soil samples were collected, including: eight (8) sidewall samples and two (2) bottom samples. Post-excavation sample results confirmed removal of lead exceeding ISCOs, with results below CSCOs. Table 7 summarizes the TP-3 post-excavation results, and lateral extents of the excavation and locations are presented on Figure 7.

All verification samples were collected and analyzed in accordance with USEPA SW-846 methodology with equivalent Category B deliverables to allow for independent third-party data usability assessment. Appendix I includes a copy of the laboratory analytical data packages.

The Data Usability Summary Reports (DUSRs), completed by Data Validation Services (DVS), indicates that sample analyses were conducted in compliance with the required analytical protocols. Most sample results are usable either as reported or with minor qualification/edit, with the exception of the results for 1,4-dioxane, which are not usable in the samples due to poor processing responses (a common occurrence). The DUSR is included in Appendix K.

Regarding post-removal radiologic screening. GRD and AMS provided post-radiologic removal clearance screening on the project. Post-removal screening results were all less than or equal to background readings of 6,000-8,000 cpm. GRD/AMS also completed post-removal screening of heavy equipment involved in the removal activities. Documents are included in Appendix J.

4.5 On-Site Reuse and Imported Backfill

4.5.1 On-Site Reuse of Clean Soils

Based on the RI and IRM results for the 401 Buffalo Avenue portion of the Site, whereby all soil analytical results were below Residential Use SCOs, clean soils excavated as part of the redevelopment of the 401 Buffalo Avenue portion of the Site, were used to

backfill the TP-3 excavation on 430 Buffalo Avenue, backfill and grade the remedial excavation on the 402 Buffalo Avenue portion of the Site, and as clean cover material for the cover system on 430 Buffalo Avenue. In total, approximately 9,000 cubic yards of clean soil was reused on-Site with approval from NYSDEC.

4.5.2 Imported Off-site Source Stone

Prior to bringing imported backfill material on-Site, analytical sampling results and/or stone sieve analysis were provided to the Department for review and approval, in accordance with DER-10 requirements. Two (2) virgin-source stone quarries, LaFarge Niagara Plant, and LaFarge Lockport plant were approved for backfill stone.

To date, 7,813 tons of approved virgin-source 2-inch run-of-crush (ROC) stone Lafarge, was used as backfill on 401 Buffalo Avenue in association with the hotel redevelopment project; and 222 tons of ROC was used to backfill-grade a portion of 402 Buffalo Avenue parcel.

Approximately 850 tons of approved No. 1 stone from Lafarge, was used as backfill on 401 Buffalo Avenue in association with the hotel redevelopment project.

Backfill source material was approved in accordance with the work plan, DER-10 and/or correspondence with the Department. Table 8 summarizes the backfill analytical results, and Table 9 summarizes the backfill stone source and quantity. NYSDEC approval of backfill material is provided in Appendix E, and backfill source scale receipts and sieve analysis are included in Appendix L.

4.6 Contamination Remaining at the Site

Based on findings of the RI and post-excavation soil analytical results for the completed IRMs, the 401 and 402 Buffalo Avenue parcels comply with 6NYCRR Part 375 Residential Use SCOs. Certain locations remain on Site with soils exceeding Unrestricted Use SCOs (see Table 10 and Figure 9).

Some soil/fill remaining beneath the cover system on the 430 Buffalo Avenue parcel exceeds the Unrestricted, Restricted-Residential and Commercial Use SCOs (see Table 10); however, the remaining contamination is beneath the cover system, limited access with the exception of construction workers. All elevated detections from sample locations on the 430 Buffalo Avenue parcel are below 100 ppm total PAHs, with one minor exception; and those

areas are located beneath the cover system, in compliance with the Track 4 Restricted Residential Use cleanup.

Based on the RI groundwater data, the vast majority of analytes were detected below GWQS. Select VOCs, SVOCs, one metals and one pesticide were detected slightly above their GWQS. No PCBs or herbicides were detected above GWQS. Table 11 summarizes the RI groundwater results, and Figure 3 identifies well locations.

Figure 9 summarizes the results of all soil samples remaining at the site after completion of Remedial Action that exceed the Track 1 (unrestricted) SCOs. Since contaminated soil and groundwater remains beneath the cover system on 430 Buffalo Avenue after completion of the Remedial Action, Institutional and Engineering Controls are required to protect human health and the environment. These Engineering and Institutional Controls (ECs/ICs) are described in the following sections. Long-term management of these EC/ICs and residual contamination will be performed under the Site Management Plan (SMP) approved by the NYSDEC.

4.7 Soil Cover System

Exposure to remaining contamination in soil/fill at the site is prevented by a soil cover system. This cover system is comprised of a minimum of 24 inches of clean soil on the 430 Buffalo Avenue parcel to address residual contamination exceeding RRSCOs; 401 and 402 Buffalo Avenue results achieved Residential Use SCOs and therefore does not require cover.

Prior to placement of clean cover soils, a demarcation layer was installed to identify material being left in-place prior to placement of minimum of 24-inches of clean soil placement. Figure 10 identifies the location of the soil cover system on 430 Buffalo Avenue, and Figure 11 provides the soil cover system details and verification survey results.

An Excavation Work Plan, which outlines the procedures required in the event the cover system and/or underlying residual contamination are disturbed, is provided in Appendix B of the approved Site Management Plan (SMP).

4.8 Other Engineering Controls

The remedy for the site did not require the construction of any other engineering control systems.

4.9 Institutional Controls

The site remedy requires that an environmental easement be placed on the property to (1) implement, maintain and monitor the Engineering Control; (2) prevent future exposure to remaining contamination by controlling disturbances of the subsurface contamination; and, (3) limit the use and development of the site to restricted residential, commercial or industrial uses only.

The environmental easement for the site was executed by the Department on November 30th, 2015, and filed with the Niagara County Clerk on December 8, 2015. The County Recording Identifier number for this filing is 2015-21593. A copy of the easement and proof of filing is provided in Appendix A.

4.10 Deviations from the Remedial Action Work Plan

The remedial activities were completed in general accordance with the approved IRM Work Plan.

Though not a deviation from the approved work plan, additional remedial measures were completed on Site, including:

- Spill No. 1504828 was opened for the Site on August 3, 2015. The spill was related to a hydraulic line failure on a roll-off delivery truck. The spill was contained to asphalt covered ground surface, approximately 10 feet by 5 feet, and was immediately addressed with sorbent spill pads and aggregate material. Impacted spill materials were containerized and disposed by the spiller (Tonawanda Tank Transport). The Spill file was closed on August 4, 2015 and additional remedial measures were completed under the BCP.

  The area of impacted asphalt was removed and transported off-site for disposal at Modern Landfill, Located in Model City, New York. It should also be noted that a second area of petroleum stained asphalt (approximately 10 feet by 10 feet) was also removed and disposed as described above. Source of additional staining is unknown.

- During the F5 caisson drilling, suspect petroleum odors were noted by the geotechnical drillers. Spoils from the F5 drilling were stockpiled in

accordance with the approved SFMP, and transported off-site for disposal at Modern Landfill.

5.0 REFERENCES

1. TurnKey Environmental Restoration, LLC. *Site Management Plan, 402 and 430 Buffalo Avenue Site, Niagara Falls, New York, BCP Site No. C932164*. August 2015 (draft).
2. Benchmark Environmental Engineering and Science, PLLC, in association with TurnKey Environmental Restoration, LLC. *Remedial Investigation/Interim Remedial Measures/Alternatives Analysis Report, 402 and 430 Buffalo Avenue Site, Niagara Falls, New York. BCP Site No. C932164*. August 2015
3. TurnKey Environmental Restoration, LLC. *Addendum to the Interim Remedial Measures Work Plan, 402 and 430 Buffalo Avenue Site, Niagara Falls, New York, BCP Site No. C932164*. December 2014.
4. TurnKey Environmental Restoration, LLC. *Interim Remedial Measures Work Plan, 401Buffalo Avenue Site, Niagara Falls, New York, BCP Site No. C932164*. December 2014.
5. TurnKey Environmental Restoration, LLC. *Remedial Investigation Work Plan, 401, 402, and 430 Buffalo Avenue Site, Niagara Falls, New York, BCP Site No. C932164*. November 2014.
6. New York State Department of Environmental Conservation. *DER-10 - Technical Guidance for Site Investigation and Remediation*. May 2010.

TABLES

TABLE 1

SUMMARY OF OFF-SITE SOIL/FILL SAMPLE RESULTS

FINAL ENGINEERING 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						
				Northern Boundary - 1 (1.5'-2.5')	Northern Boundary - 2 (1.5'-2.5')	Northern Boundary - 3 (1.5'-2.5')	Northern Boundary - 4 (1.5'-2.5')	Eastern Boundary - 1 (1.5'-2.5')	Eastern Boundary - 2 (1.5'-2.5')	Eastern Boundary - 3 (1.5'-2.5')
				10/27/2015				12/7/2015		
Semi-Volatile Organic Compounds (SVOCs) - mg/Kg [3]										
2-Methylnaphthalene	--	--	--	0.11 J	0.065 J	ND	ND	ND	ND	ND
Acenaphthene	20	100	500	0.82	0.37	0.048 J	0.057 J	ND	0.045 J	ND
Acenaphthylene	100	100	500	1	1.4	0.11 J	0.12 J	ND	ND	ND
Acetophenone	--	--	--	ND	ND	ND	0.15 J	ND	ND	ND
Anthracene	100	100	500	2.6	1.4	0.15	0.21	ND	0.072 J	ND
Benzaldehyde	--	--	--	ND	ND	ND	ND	0.23 J	0.14 J	0.082 J
Benzo(a)anthracene	1	1	5.6	**9.2**	**5.4**	0.44	0.88	0.091 J	0.26 J	ND
Benzo(a)pyrene	1	1	1	**8.8**	**5.2**	0.38	0.96	0.074 J	0.27 J	ND
Benzo(b)fluoranthene	1	1	5.6	**11**	**6.9**	0.51	**1.5**	0.098 J	0.39 J	ND
Benzo(ghi)perylene	100	100	500	5.2	3.2	0.21	0.55	0.047 J	0.19 J	ND
Benzo(k)fluoranthene	0.8	3.9	56	**4.2**	**2.4**	0.22	0.47	0.04 J	0.14 J	ND
Carbazole	--	--	--	1	0.4	0.065 J	0.1 J	ND	0.065 J	ND
Chrysene	1	3.9	56	**9.5**	**5.2**	0.52	0.93	0.086 J	0.27	ND
Dibenzo(a,h)anthracene	0.33	0.33	0.56	**1.6**	**1.1**	0.067	0.17	ND	0.047	ND
Dibenzofuran	7	59	350	0.3	0.1 J	ND	ND	ND	ND	ND
Fluoranthene	100	100	500	18	9	0.87	1.5	0.18	0.59	0.057 J
Fluorene	30	100	500	0.69	0.28	ND	0.061 J	ND	ND	ND
Hexachlorobutadiene	--	--	--	0.45	0.13 J	0.085 J	ND	ND	ND	ND
Indeno(1,2,3-cd)pyrene	0.5	0.5	5.6	**5.8**	**3.6**	0.26	**0.6**	0.11 J	0.24	ND
Naphthalene	12	100	500	0.23	0.11 J	ND	ND	ND	ND	ND
Phenanthrene	100	100	500	7.3	2.9	0.67	0.76	0.12	0.38	ND
Pyrene	100	100	500	15	6.6	0.72	1.3	0.14	0.45	0.045 J
Total PAHs	--	100	500	**100.94**	55.06	5.18	10.07	0.99	3.34	0.10
Metals - mg/Kg										
Arsenic	13	16	16	6.9	6.8	4.3	4.2	**24**	4.3	4.6
Barium	350	400	400	**390**	260	50	64	110	63	59
Beryllium	7.2	72	590	0.28	0.13 J	0.19 J	0.19 J	0.067 J	0.35 J	0.36 J
Cadmium	2.5	4.3	9.3	0.34 J	**2.7**	0.57	0.51	0.4	0.28	0.39
Chromium	30	180	1500	13	6.8	6.8	7.7	23	11	8.4
Copper	50	270	270	15	16	17	18	26	21	17
Lead	63	400	1000	**1100**	**360**	**73**	**85**	**220**	**87**	**76**
Manganese	1600	2000	10000	380	440	540	550	640	450	750
Mercury	0.18	0.81	2.8	0.06 J	0.13	**0.83**	0.1	**0.6**	0.2	0.17
Nickel	30	310	310	8.2	6.4	7.5	8	13	15	9.8
Selenium	3.9	4	4	ND	ND	ND	ND	0.32	ND	ND
Silver	2	8.3	8.3	ND	ND	ND	ND	0.3	ND	ND
Zinc	109	10000	10000	**550**	**1200**	**330**	**280**	**190**	**160**	**230**

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 per6NYCRR Part 375 Soil Cleanup Objectives (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 2

SUMMARY OF MATERIALS REMOVED FROM SITE

402 AND 430 BUFFALO AVENUE SITE

NIAGARA FALLS, NEW YORK

Activity and Material/Item	Quantity	Units	Responsible/Transportation Company	Trucking No.	Disposal Location/ Facility ID	Disposal Profile No.
Soil/Fill						
Petroleum Impacted Soil/Fill (June 2015)	41.53	Tons	RE Lorenz	9A-799	Modern Landfill, Model City NY	M15-2816
Island Area - Metal Impacted Soil/Fill (June 2015)	454.17	Tons	RE Lorenz	9A-799	Modern Landfill, Model City NY	M15-2816
Pool Area Aresenic Impacted Soil/Fill (June 2015)	218.99	Tons	RE Lorenz	9A-799	Modern Landfill, Model City NY	M15-2816
SS-2 Metal Impacted Soil/Fill (June 2015)	43.46	Tons	RE Lorenz	9A-799	Modern Landfill, Model City NY	M15-2816
TP-3 Lead Impacted Soil/Fill (August 2015)	615.96	Tons	RE Lorenz	9A-799	Modern Landfill, Model City NY	M15-2816
Spill No. 1504828 and F5 - Petroleum-Impacted Asphalt-Soil/Fill	41.50	Tons	RE Lorenz	9A-799	Modern Landfill, Model City NY	M15-2816
Chemical Waste						
Liquid Wastes	10	Drums	Clean Harbor Environmental Services, Inc.	MAD039322250	Clean Harbors El Dorado, LLC, El Dorado, Arkansas (ARD069748192)	CH983431
Compressed Helium	1	Drum	Clean Harbor Environmental Services, Inc.	MAD039322250	Clean Harbors La Porte, LLC, La Porte, Texas (TXD982290140)	CM042715
Carbon Dioxide	1	Drum	Clean Harbor Environmental Services, Inc.	MAD039322250	Clean Harbors La Porte, LLC, La Porte, Texas (TXD982290140)	CM042715
Used Petroleum Oil	2	Drums	Clean Harbor Environmental Services, Inc.	MAD039322250	Spring Grove Resource Recovery, Inc., Spring Grove, Ohio (OHD000816629)	CH983431
Oil Based Paint Cans	1	Drum	Clean Harbor Environmental Services, Inc.	MAD039322250	Clean Harbors El Dorado, LLC, El Dorado, Arkansas (ARD069748192)	CH983422
Flammable Waste Aerosols	1	Drum	Clean Harbor Environmental Services, Inc.	MAD039322250	Clean Harbors El Dorado, LLC, El Dorado, Arkansas (ARD069748192)	CH983418
Propane	1	5 Gal. Pail	Clean Harbor Environmental Services, Inc.	MAD039322250	Clean Harbors La Porte, LLC, La Porte, Texas (TXD982290140)	CH983418
MAPP (Methyl acetylene and propadiene mixtures)	1	5 Gal. Pail	Clean Harbor Environmental Services, Inc.	MAD039322250	Clean Harbors La Porte, LLC, La Porte, Texas (TXD982290140)	CM042715
Waste Latex Paint	1	Drum	Clean Harbor Environmental Services, Inc.	MAD039322250	Spring Grove Resource Recovery, Inc., Spring Grove, Ohio (OHD000816629)	CH983449
Lead Acid Batteries	1	Drum	Clean Harbor Environmental Services, Inc.	MAD039322250	Clean Harbors El Dorado, LLC, El Dorado, Arkansas (ARD069748192)	CH983422
Hydraulic Oil (Elevator)	7	Drums	North American Industrial Services	9A-777	American Recyclers Company, Tonawnada NY (NYR00030809)	G-10106IN
Universal Wastes (Per 56 Services, Inc.)						
PCB Light Ballasts	1	Drums	Franks Vacuum Truck Service, Inc.	9A-332/ NYD982792814	CWM Chemical Services, Inc. Model City, NY (NYD049836679)	NY305490
Universal Waste Lamps Compact Fluorescent Bulbs	1	Drums	Franks Vacuum Truck Service, Inc.	9A-332/ NYD982792814	CWM Chemical Services, Inc. Model City, NY (NYD049836679)	114262NY
Universal Waste Lamps Fluorescent Tubes	7	Drums	Franks Vacuum Truck Service, Inc.	9A-332/ NYD982792814	CWM Chemical Services, Inc. Model City, NY (NYD049836679)	114228NY
Fire Extinguishers	6	Each	Per 56 Services, Inc.	-	Dival Safety Equipment, Buffalo, New York	--
Power Cell Batteries	20	Each	Per 56 Services, Inc.	-	Niagara Metals Recycling Facility, Niagara Falls, New York (7104997)	--
Smoke Detectors	150	Each	Per 56 Services, Inc.	-	System Sensor (Returned to Manufacturer for Mercury Recovery)	--
Radiologic Material						
Radiologic Material (401 Buffalo Avenue)	72.5	Tons	GRD/ Tonawanda Tank Transport, Inc.	9A-080	Waste Management's Mahoning Landfill, New Springfield, Ohio	493274OH
Radiologic Material (402 Buffalo Avenue)	1,180.13	Tons	MS/ McCutcheon Enterprises, Inc./ D&V Trucking, In	PA-007/ OH-168	Energy Solutions - Clive Facility Containerized Waste, Clive, Utah	UTD982598898
Transformer Room (PCB Impacted Material)						
PCB Wastes - Concrete, Soil and Debris (NY305749)	41.46	Tons	Tonawanda Tank Transport, Inc.	NYD097644801	CWM Chemical Services, Inc. Model City, NY (NYD049836679)	NY305749
PCB Wastes - Transformers (NY305750)	3	Transformers	Tonawanda Tank Transport, Inc.	NYD097644801	CWM Chemical Services, Inc. Model City, NY (NYD049836679)	NY305750
PCB Wastes - Transformers Inners (NY305750)	8	Drums	Tonawanda Tank Transport, Inc.	NYD097644801	CWM Chemical Services, Inc. Model City, NY (NYD049836679)	NY305750
PCB Sorbent Wastes (NY305807)	2	Drums	Tonawanda Tank Transport, Inc.	NYD097644801	CWM Chemical Services, Inc. Model City, NY (NYD049836679)	NY305807

TABLE 3

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

FINAL ENGINEERING REPORT

402 AND 430 BUFFALO AVENUE SITE

NIAGARA FALLS, NEW YORK

PARAMETER[1]	Unrestricted 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**	ND	0.0056 J	ND
4-methyl-2-pentanone (MIBK)	**--**	ND	0.00094 J	0.0024 J
Acetone	**0.05**	ND	0.0097 B,J	ND
Tetrachloroethene	**1.3**	0.00027 B,J	ND	ND
Semi-Volatile Organic Compounds (SVOCs) - mg/Kg [3]				
Bis(2-ethylhexyl) phthalate	**--**	0.048 J	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:

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.
B= Compund was found in the laboratory method blank.

Bold = Result exceeds Unrestricted Use SCOs.

TABLE 4

SUMMARY OF 401 BUFFALO AVENUE IRM POST EXCAVATION SOIL SAMPLING RESULTS

FINAL ENGINEERING REPORT

402 AND 430 BUFFALO AVENUE SITE

NIAGARA FALLS, NEW YORK

PARAMETER[1]	Unrestricted Use SCOs [2]	401 Buffalo Avenue IRM Excavation Area - Sample Location									
		Parking Lot - Island Area				Pool Area					SS-2
		Bottom Comp 1	Bottom Comp 2	Bottom Comp 3	Bottom Comp 4	North Wall	South Wall	East Wall	West Wall	Bottom	Comp
		6/3/2015				6/4/2015					6/4/2015
Metals - mg/Kg											
Arsenic	**13**	1.8	3.2	1.4	2.8	2.4	1.9	1.6	0.77	2.1	2.5
Barium	**350**	31	18	42	40	22	30	13	11	24	24
Beryllium	**7.2**	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	0.2 J
Cadmium	**2.5**	ND	ND	ND	ND	ND	ND	ND	0.08 J	0.04 J	ND
Chromium	**30**	6.2	5.2	5.9	3.1	5.8	6.3	4.6	3.1	4.3	5.5
Copper	**50**	8.8	9.6	6.7	6.9	7.1	7	5.1	3.4	6	6.2
Lead	**63**	24	1.7 J	33	60	3.2	5.1	2 J	22	22	6.3
Manganese	**1600**	380	150	600	260	280	290	290	240	340	270
Mercury	**0.18**	0.08	0.08	0.16	0.12	0.077 J	0.09 J	0.068 J	0.08	0.1	0.03
Nickel	**30**	6.8	8.4	5.4	3.4	7.4	7.2	5.8	2.8	4.6	5.6
Silver	**2**	ND	ND	0.16 J	0.08 J	ND	ND	ND	0.09 J	0.09 J	ND
Selenium	**--**	ND	ND	ND	ND	ND	ND	ND	ND	0.14 J	ND
Zinc	**109**	70	28	63	59	37	41	29	100	99	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.
J = Estimated value; result is less than the sample quantitation limit but greater than zero.

Bold = Result exceeds Unrestricted Use SCOs.

TABLE 5

SUMMARY OF TRANSFORMER ROOM PCB POST-EXCAVATION SOIL ANALYTICAL RESULTS

FINAL ENGINEERING REPORT

402 AND 430 BUFFALO AVENUE SITE

NIAGARA FALLS, NEW YORK

PARAMETER[1]	Unrestricted Use SCOs[2]	Residential 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**	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 Residential Use SCOs.

TABLE 6

SUMMARY OF TRANSFORMER ROOM POST-REMEDIAL PCB WIPE SAMPLE RESULTS

FINAL ENGINEERING REPORT

402 and 430 BUFFALO AVENUE SITE

NIAGARA FALLS, NEW YORK

Parameter[1]	Transformer Room PCB Wipe Sample Locations			
	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 7

SUMMARY OF 430 BUFFALO AVENUE TP-3 AREA IRM POST-EXCAVATION CONFIRMATORY SOIL ANALYTICAL RESULTS

FINAL ENGINEERING 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]	430 Buffalo Avenue TP-3 IRM Excavation Area - Sample Location									
				Northwall 1	Northwall 2	Eastwall 1	Eastwall 2	Southwall 1	Southwall 2	Westwall 1	Westwall 2	Bottom 1	Bottom 2
				8/10/2015									
Semi-Volatile Organic Compounds (SVOCs) - mg/Kg [3]													
Acenaphthene	**20**	**100**	**500**	ND	1.5	0.59 J	ND	ND	ND	1.3	ND	ND	0.16
Acenaphthylene	**100**	**100**	**500**	ND	0.77	ND	ND	ND	ND	0.57	ND	ND	0.16
Anthracene	**100**	**100**	**500**	0.38 J	5.2	1.3	ND	ND	ND	3.4	ND	ND	0.12
Benzo(a)anthracene	**1**	**1**	**5.6**	1.4	13	3.1	ND	ND	ND	7.2	ND	ND	0.12
Benzo(a)pyrene	**1**	**1**	**1**	1.3	12	2.8	ND	ND	ND	5.8	ND	ND	0.16
Benzo(b)fluoranthene	**1**	**1**	**5.6**	1.3	12	2.4	ND	ND	ND	7.7	ND	ND	0.12
Benzo(ghi)perylene	**100**	**100**	**500**	0.83	6.9	1.6	ND	ND	ND	3.6	ND	ND	0.16
Benzo(k)fluoranthene	**0.8**	**3.9**	**56**	1	9.6	2.3	ND	ND	ND	2.7	ND	ND	0.12
Chrysene	**1**	**3.9**	**56**	1.4	13	3	ND	ND	ND	6.7	ND	ND	0.12
Dibenzo(a,h)anthracene	**0.33**	**0.33**	**0.56**	0.22	2	0.62	ND	ND	ND	0.92	ND	ND	0.12
Dibenzofuran	**7**	**59**	**350**	ND	0.86 J	0.36 J	ND	ND	ND	0.93	ND	ND	0.19 J
Fluoranthene	**100**	**100**	**500**	2.7	29	6.5	ND	0.05 J	ND	16	ND	ND	0.12
Fluorene	**30**	**100**	**386**	ND	1.6	0.59 J	ND	ND	ND	1.6	ND	ND	0.19
Indeno(1,2,3-cd)pyrene	**0.5**	**0.5**	**5.6**	0.76	6.8	1.5	ND	ND	ND	4.2	ND	ND	0.16
Naphthalene	**12**	**100**	**500**	ND	0.73 J	0.36 J	ND	ND	ND	0.99	ND	ND	0.19 J
Phenanthrene	**100**	**100**	**500**	1.4	19	5.4	ND	ND	ND	12	ND	ND	0.12
Pyrene	**100**	**100**	**500**	2.2	22	5.3	ND	0.041 J	ND	13	ND	ND	0.12
Total PAHs	--	**100**	**500**	14.89 J	155.1	37.36	ND	0.091	ND	87.68	ND	ND	2.26
Metals - mg/Kg													
Arsenic	**13**	**16**	**16**	3.9	6.2	5.1	2	3.4	2.3	6.2	3.3	2.3	2.5
Barium	**350**	**400**	**400**	150	350	330	17	50	27	280	57	27	25
Beryllium	**7.2**	**72**	**590**	0.2 J	0.16 J	0.21 J	0.17 J	0.3	0.2 J	0.28	0.34	0.22 J	0.23
Cadmium	**2.5**	**4.3**	**9.3**	0.21 J	ND	0.92	ND	ND	ND	ND	ND	ND	ND
Chromium	**30**	**180**	**1500**	7.7	7	7.1	5.5	7.8	6.3	10	8	6.8	7.2
Copper	**50**	**270**	**270**	14	19	28	7.9	12	7.4	20	9.7	8.9	8.6
Lead	**63**	**400**	**1000**	260	320	810	9	38	5.7	650	44	14	3.3
Manganese	**1600**	**2000**	**10000**	470	390	440	160	470	400	390	600	380	370
Mercury	**0.18**	**0.81**	**2.8**	0.08	0.1	0.13	0.02 J	0.25	0.02 J	0.13	0.05 J	0.02 J	ND
Nickel	**30**	**310**	**310**	7	6.8	6.7	6.4	8.6	7.6	9.1	7.4	8.1	8.4
Silver	**2**	**180**	**1500**	ND	ND	ND	ND	ND	ND	ND	0.16 J	ND	ND
Zinc	**109**	**10000**	**10000**	300	410	660	180	120	54	370	83	110	58

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.
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.

TABLE 8

SUMMARY OF OFF-SITE SOURCE BACKFILL ANALYTICAL RESULTS

FINAL ENGINEERING REPORT

402 AND 430 BUFFALO AVENUE SITE

NIAGARA FALLS, NEW YORK

PARAMETER[1]	Residential Use [2]	Sample Location (Lafarge - Lockport)				Sample Location (Lafarge - Niagara)			
		Grab 1	Grab 2	Grab 3	Composite	Grab 1	Grab 2	Grab 3	Composite
		8/7/2015				8/7/2015			
Volatile Organic Compounds (VOCs) - mg/Kg [3]									
Acetone	**0.05**	ND	ND	ND	--	ND	0.011	ND	--
Methylcyclohexane	**--**	ND	ND	ND	--	ND	ND	0.0004 J	--
Total Xylenes	**1.6**	ND	ND	ND	--	0.00141 J	0.00202 J	0.00183 J	--
Semi-Volatile Organic Compounds (SVOCs) - mg/Kg [3]									
Bis(2-ethylhexyl) phthalate	**--**	--	--	--	ND	--	--	--	0.073 J
Total Metals - mg/Kg									
Aluminum	**--**	--	--	--	930	--	--	--	1000
Antimony	**--**	--	--	--	ND	--	--	--	ND
Arsenic	**16**	--	--	--	2.1	--	--	--	3.5
Barium	**350**	--	--	--	4.2	--	--	--	7.2
Beryllium	**14**	--	--	--	ND	--	--	--	0.08 J
Cadmium	**2.5**	--	--	--	0.61 J	--	--	--	0.42 J
Calcium	**--**	--	--	--	190000		--	--	180000
Chromium	**36**	--	--	--	3.1	--	--	--	3
Cobalt	**--**	--	--	--	1 J		--	--	1.3 J
Copper	**270**	--	--	--	3.4	--	--	--	3.9
Iron	**--**	--	--	--	5400		--	--	5800
Lead	**400**	--	--	--	59	--	--	--	35
Magnesium	**--**	--	--	--	1000000		--	--	100000
Manganese	**2000**	--	--	--	540	--	--	--	910
Mercury	**0.73**	--	--	--	ND	--	--	--	ND
Nickel	**130**	--	--	--	2.3	--	--	--	2.7
Potassium	**--**	--	--	--	760		--	--	820
Selenium	**4**	--	--	--	0.42 J	--	--	--	ND
Silver	**8.3**	--	--	--	0.24 J	--	--	--	0.4 J
Sodium	**--**	--	--	--	260	--	--	--	480
Thallium	**--**	--	--	--	ND	--	--	--	ND
Vanadium	**--**	--	--	--	3.7	--	--	--	3.5
Zinc	**2200**	--	--	--	170	--	--	--	200
Polychlorinated biphenyls (PCBs) - mg/Kg [3]									
Total PCBs	**1**	--	--	--	ND	--	--	--	ND
Pesticides and Herbicides - mg/Kg [3]									
alpha-Chlordane	**0.91**	--	--	--	ND	--	--	--	0.000608 J
Heptachlor	**0.38**	--	--	--	ND	--	--	--	0.00114

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 NYSDEC Offsite Source Criteria Appendix 5 of DER-10.

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 "-" Exceeds the DER-10 Offsite Source Criteria for Residential Use.

TABLE 9

SUMMARY OF BACKFILL QUANTITIES AND SOURCES

402 AND 430 BUFFALO AVENUE SITE

NIAGARA FALLS, NEW YORK

Backfill - Location and Placement	Quantity	Units	Source of Imported Backfill	Description
401 Buffalo Avenue - Hotel Redevelopment Activities	7813.2	Tons	Lafarge Aggregate Plant, Niagara Falls, New York	2" Run-of-Crush
	849.61	Tons	Lafarge Aggregate Plant, Niagara Falls, New York	Clean NY #1s Stone
402 Buffalo Avenue - Backfill and Grading	222.2	Tons	Lafarge Aggregate Plant, Niagara Falls, New York	2" Run-of-Crush

TABLE 10

SUMMARY OF REMAINING ON-SITE SOIL/FILL ABOVE UNRESTRICTED USE SCOs

FINAL ENGINEERING REPORT

402 AND 430 BUFFALO AVENUE SITE

NIAGARA FALLS, NEW YORK

PARAMETER[1]	Unrestricted Use SCOs [2]	SAMPLE LOCATION (DEPTH)																												
		TP-5 (1-3')	TP-7 (2-4')	SS-1	SS-4	SS-6	SS-7	TP-11 (1-3')	TP-12 (6-8')	TP-13 (1-3')	TP-14 (4-10')	TP-20 (1-3')	TP-22 (1-3')	TP-24 (1-4')	TP-25 (1-4')	TP-26 (1-3')	TP-28 (1-4')	TP-29 (1-4')	MW-3 (2-8')	SB-16 (1-7')	SB-7 (1-5')	SB-8 (MW-10) (8-10')	PCB Area B-1 (1')	PCB Area D-1 (1')	TP-3 Northwall 1	TP-3 Northwall 2	TP-3 Eastwall 1	TP-3 Eastwall 2	TP-3 Southwall 1	TP-3 Westwall 1	TP-3 Bottom 1
		10/4/2013		2/9-10/2015				2/9/2015				2/9/2015	2/11/2015			2/10/2015			4/15/2015		2/25/2015		7/22/2015		8/10/2015						
Volatile Organic Compounds (VOCs) - mg/Kg [3]																														
Acetone	**0.05**	--	--	--	--	--	--	ND	--	**0.061 J**	0.044 J	--	--	0.011 J	--	ND	--	--	0.031	--	--	**0.44 J**	--	--	--	--	--	--	--	--
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	0.48 J	0.84 J	ND	ND	ND	ND	ND		--	--	--	--	--	ND	ND	--	ND
Acenaphthene	**20**	2.2	0.052 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.2	0.14 J	1.7	ND	ND	ND	ND	ND	ND	ND	--	--	ND	1.5	0.59 J	ND	ND	1.3	ND
Acenaphthylene	**100**	2.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.63 J	0.44	0.83 J	2.6	ND	ND	ND	ND	ND	ND	--	--	ND	0.77	ND	ND	ND	0.57	ND
Anthracene	**100**	9.8 J	0.2 J	0.082 J	ND	0.034 J	ND	ND	ND	ND	ND	ND	3.6	0.62	5	7	ND	ND	ND	ND	ND	ND	--	--	0.38 J	5.2	1.3	ND	ND	3.4	ND
Benzo(a)anthracene	**1**	**31**	0.47	0.23	0.042 J	0.11 J	0.059 J	ND	0.05 J	ND	ND	ND	**7.7**	**1.8**	**12**	**14**	ND	ND	ND	ND	ND	ND	--	--	**1.4**	**13**	**3.1**	ND	ND	**7.2**	ND
Benzo(a)pyrene	**1**	**30**	0.41	0.22	ND	0.11 J	0.067 J	ND	0.051 J	ND	ND	ND	**6.4**	**1.6**	**11**	**13**	ND	ND	ND	ND	ND	ND	--	--	**1.3**	**12**	**2.8**	ND	ND	**5.8**	ND
Benzo(b)fluoranthene	**1**	**38**	0.53	0.31	0.049 J	0.12	0.11	ND	0.071 J	ND	ND	ND	**8.3**	**2.2**	**15**	**16**	ND	ND	ND	ND	ND	ND	--	--	**1.3**	**12**	**2.4**	ND	ND	**7.7**	ND
Benzo(ghi)perylene	**100**	**18**	0.22	0.13 J	ND	0.062 J	0.058 J	ND	ND	ND	ND	ND	**3.8**	**0.98**	**6.1**	**7**	ND	ND	ND	ND	ND	ND	--	--	0.83	6.9	1.6	ND	ND	3.6	ND
Benzo(k)fluoranthene	**0.8**	**14**	0.23	0.13	ND	0.055 J	0.04 J	ND	ND	ND	ND	ND	**3.2**	**2**	**5.3**	**6.6**	ND	ND	ND	ND	ND	ND	--	--	**1**	**9.6**	**2.3**	ND	ND	**2.7**	ND
Chrysene	**1**	**31**	0.47	0.25	0.037 J	0.1 J	0.067 J	ND	0.057 J	ND	ND	ND	**7.1**	**1.6**	**12**	**13**	ND	ND	ND	ND	ND	ND	--	--	**1.4**	**13**	**3**	ND	ND	**6.7**	ND
Dibenzo(a,h)anthracene	**0.33**	**5**	0.069	ND	ND	ND	ND	ND	ND	ND	ND	ND	**0.92**	ND	**1.6**	**1.8**	ND	ND	ND	ND	ND	ND	--	--	**0.22**	**2**	**0.62**	ND	ND	**0.92**	ND
Dibenzofuran	**7**	**--**	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	**0.82**	0.088 J	**1.2**	**1.2**	ND	ND	ND	ND	ND	0.17 J	--	--	ND	0.86 J	0.36 J	ND	ND	0.93	ND
Fluoranthene	**100**	**68**	0.93	0.5	0.073 J	0.22	0.091 J	ND	0.11	ND	ND	0.042 J	**15**	3.8	**24**	**26**	ND	ND	ND	ND	ND	0.27	--	--	2.7	29	6.5	ND	0.05 J	16	ND
Fluorene	**30**	**2.8**	0.061	ND	ND	ND	ND	ND	ND	ND	ND	ND	**1.3**	ND	**2.2**	**2.4**	ND	ND	ND	ND	ND	0.19 J	--	--	ND	1.6	0.59 J	ND	ND	1.6	ND
Indeno(1,2,3-cd)pyrene	**0.5**	**19**	0.24	0.15 J	ND	0.063 J	0.061 J	ND	ND	ND	ND	ND	**4.1**	**1.2**	**7**	**8**	ND	ND	ND	ND	ND	ND	--	--	0.76	6.8	1.5	ND	ND	4.2	ND
Naphthalene	**12**	0.92 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.68 J	**ND**	1.7	1.4	ND	ND	ND	ND	ND	ND	--	--	ND	0.73 J	0.36 J	ND	ND	0.99	ND
Phenanthrene	**100**	29	0.65	0.34	ND	0.15	0.039 J	ND	0.039 J	ND	ND	ND	14	**1.8**	17	23	ND	ND	ND	ND	ND	ND	--	--	1.4	19	5.4	ND	ND	12	ND
Pyrene	**100**	56	0.75	0.39	0.059 J	0.19	0.079 J	ND	0.09 J	ND	ND	ND	13	**2.9**	19	22	ND	ND	ND	ND	ND	ND	--	--	2.2	22	5.3	ND	0.041 J	13	ND
Total PAHs	--	356 J	5.1	2.732	0.26	1.214	0.671	ND	0.468	ND	ND	0.042	93.25	21.685	159.72	167.6	ND	ND	ND	ND	ND	0.63	--	--	17.85	185.49	44.88	ND	0.091	106.8	ND
Metals - mg/Kg																														
Arsenic	**13**	6	6.3	9.5	4.9	12	2.6	5.2	2.9	6.4	4.3	4.9	10	9.5	5.1	13	3.3	2.7	4.2	7.1	2.8	3.8	--	--	3.9	6.2	5.1	2	3.4	6.2	2.3
Barium	**350**	**970**	59	86	6.7	66	13	66	21	34	22	47	**1400**	**780**	300	**1700**	17	17	52	48	13	15	--	--	150	350	330	17	50	280	27
Beryllium	**7.2**	ND	ND	0.52	0.07 J	0.31	ND	0.41	0.13 J	30	0.14 J	0.33	0.19 J	0.27	0.22	0.41	0.15 J	0.15 J	0.33	0.32 J	0.08 J	0.16 J	--	--	0.2 J	0.16 J	0.21 J	0.17 J	0.3	0.28	0.22 J
Cadmium	**2.5**	1.8	0.78	0.24 J	0.94	0.6	1.3	0.77	0.59	0.28 J	0.98	0.49 J	1	1 J	0.49 J	1.1	0.5 J	0.49 J	0.1 J	0.84 J	0.93	0.11 J	--	--	0.21 J	ND	0.92	ND	ND	ND	ND
Chromium	**30**	8.9	9.6	**34**	3	16	2.4	11	**36**	8.2	5.4	16	15	11	10	18	5.2	5.1	11	9.5	3.9	5.6	--	--	7.7	7	7.1	5.5	7.8	10	6.8
Copper	**50**	ND	ND	18	3.5	16	4.2	16	7	8.8	8.2	20	81	28	14	97	8.1	9.6	11	15	12	6.5	--	--	14	19	28	7.9	12	20	8.9
Lead	**63**	**2100**	**130**	29	41	**96**	42	**73**	18	20	46	23	**2400**	**1100**	**320**	**2400**	39	33	18	**83**	39	6.7	--	--	**260**	**320**	**810**	9	38	**650**	14
Manganese	**1600**	ND	ND	490	440	630	460	870	380	660	390	260	320	320	260	320	550	400	420	700	410	360	--	--	470	390	440	160	470	390	380
Mercury	**0.18**	0.17	0.09	0.17	0.04 J	**0.24**	0.06 J	0.1	0.02 J	0.12	0.03 J	0.16	**0.29**	**0.2**	**0.52 J**	**0.46**	0.03 J	0.02 J	ND	0.17 J	0.02 J	0.02 J	--	--	0.08	0.1	0.13	0.02 J	**0.25**	0.13	0.02 J
Nickel	**30**	ND	ND	17	3	11	2.6	11	5.2	9.3	5.4	6.6	6.8	9.4	6.2	11	4.9	5.3	12	9.2	4.3	7.2	--	--	7	6.8	6.7	6.4	8.6	9.1	8.1
Silver	**2**	0.22 J	ND	ND	0.1 J	0.11 J	ND	ND	ND	ND	ND	ND	0.14 J	0.13 J	ND	0.12 J	ND	ND	ND	0.14 J	ND	ND	--	--	ND	ND	ND	ND	ND	ND	ND
Selenium	**--**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	--	--	ND	ND	ND	ND	ND	ND	ND
Zinc	**109**	ND	ND	85	**280**	**200**	**410**	**300**	**140**	81	**200**	**110**	**2500**	**1000**	**320**	**2700**	**150**	**210**	**110**	**300**	**300**	41	--	--	**300**	**410**	**660**	**180**	**120**	**370**	**110**
Polychlorinated biphenyls (PCBs) - mg/Kg [3]																														
Total PCBs	**0.1**	ND	ND	**--**	--	--	--	**--**	**--**	ND	ND	ND	**--**	ND	**--**	ND	--	--	0.0479	ND	--	ND	**0.632**	**0.317**	**--**	**--**	**--**	**--**	**--**	**--**	**--**
Pesticides and Herbicides - mg/Kg [3]																														
Total Pesticides and Herbocides	**--**	**--**	**--**	**--**	--	--	--	--	--	ND	ND	--	--	--	--	0.0948	--	--	0.05798	--	--	ND	--	--	--	--	--	--	--	--	--

Notes:

1. Only those parameters detected above USCOs at a minimum of one sample location are presented in this table. All other detections are below USCOs or are ND.
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.

TABLE 11

SUMMARY OF REMEDIAL INVESTIGATION GROUNDWATER ANALYTICAL RESULTS

FINAL ENGINEERING 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	3.4	ND	0.82 J	ND	**7.3**	ND	ND	ND	ND	**5.3**
1,3,5-Trimethylbenzene	**5**	ND	1.1 J	ND	2.2 J	ND	1 J	ND	ND	ND	ND	0.87 J
2-Butanone	**50**	2.9 J	4.9 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	ND	1.2 J	ND	1.1 J	1.1 J	ND
Acetone	**50**	13	27	ND	4 J	ND	16	41	2.5 J	15	15	ND
Benzene	**1**	ND	**4.2**	0.44 J	**1.5**	ND	0.81	0.19 J	0.17 J	0.61	ND	ND
Carbon disulfide	**--**	2.3 J	4.1 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	ND	6.2	6.3	ND
Cyclohexane	**--**	ND	3.3 J	1.7 J	2.4 J	ND	0.48 J	ND	ND	ND	ND	0.63 J
Ethylbenzene	**5**	ND	1.4 J	ND	ND	ND	1.5 J	ND	ND	ND	ND	ND
Isopropylbenzene	**5**	ND	ND	ND	ND	ND	1.5 J	ND	ND	ND	ND	3.3
Methylcyclohexane	**--**	ND	2.3 J	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	ND	1.1 J	ND	ND	ND	ND	1.4 J
p/m-Xylene	**5**	ND	**8.4**	0.9 J	3.7	ND	1.9 J	ND	ND	ND	ND	ND
o-Xylene	**5**	ND	2.9	0.74 J	1.2 J	ND	ND	ND	ND	ND	ND	ND
Xylene, Total	**5**	ND	**11.3**	1.64	4.9	ND	ND	ND	ND	1.4 J	ND	ND
sec-Butylbenzene	**5**	ND	ND	ND	ND	ND	1.4 J	ND	ND	ND	ND	3.1
Tetrachloroethene	**5**	ND	ND	ND	0.37 J	ND	ND	0.47 J	ND	0.23 J	ND	ND
Toluene	**5**	ND	12	1.2 J	4.5	ND	1.6 J	ND	ND	1.6 J	ND	ND
Trichloroethene	**--**	ND	12	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	**--**	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	**0**	**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	**--**	**0.08 J**	ND	--	ND	ND	ND	**0.09 J**	--	ND	ND	ND
Biphenyl	**--**	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	**--**	**0.11 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
Dissolved Metals - 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	8	**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:

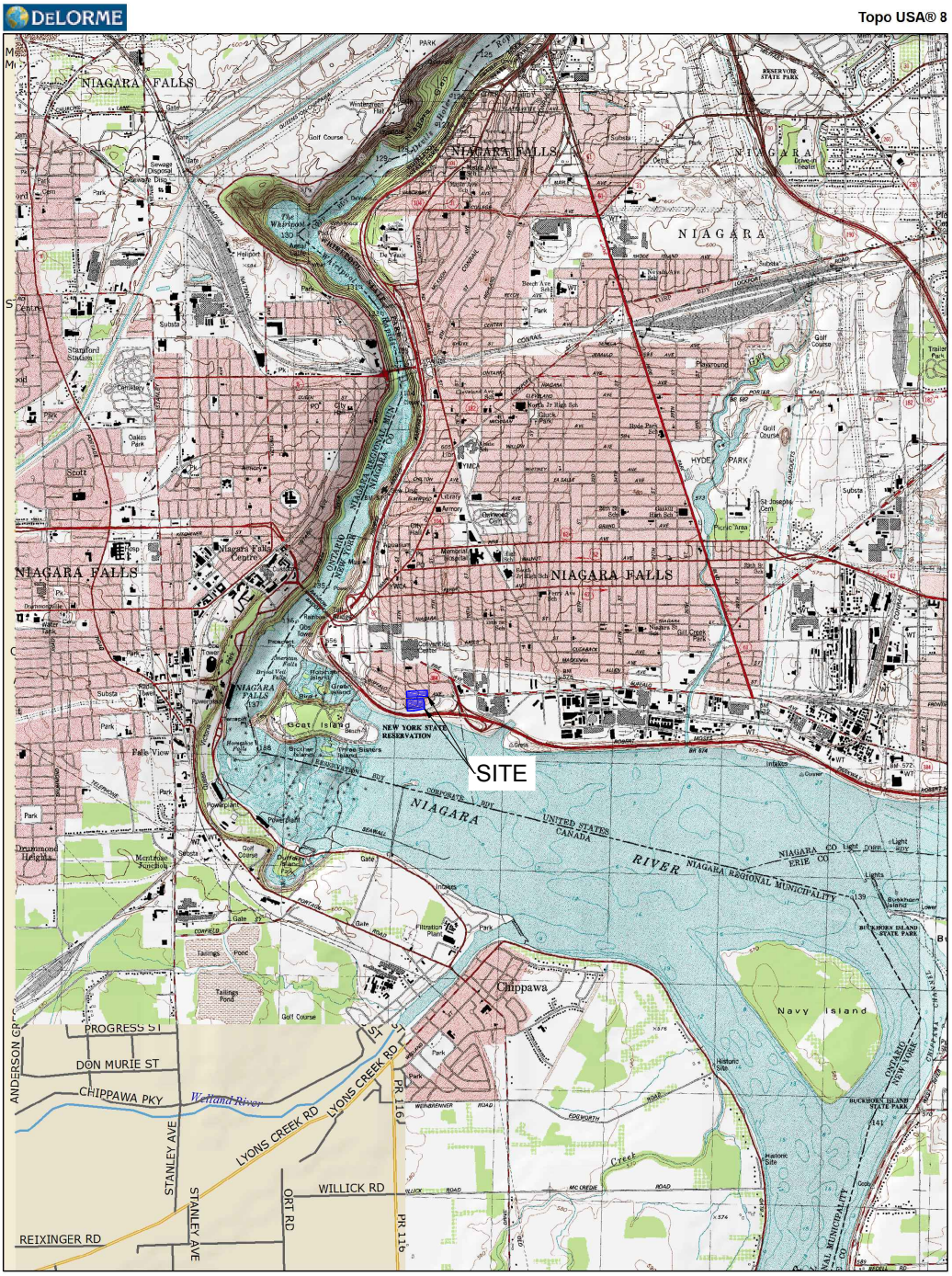
ND = Parameter not detected above laboratory detection limit.
"--" = Sample not analyzed for parameter or no GWQS available for the parameter.
J = Estimated Value - Below calibration range
P = The dual column RPD's are above the acceptance criteria, the lower of the two results is reported.
I = The lower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

BOLD = Result exceeds GWQS.

FIGURES

F:\CAD\TurnKey\Merani Hospitality\401, 402, and 430 Buffalo Ave\FER\Figure 1; Site Location and Vicinity Map.dwg

FIGURE 1



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

SITE LOCATION AND VICINITY MAP

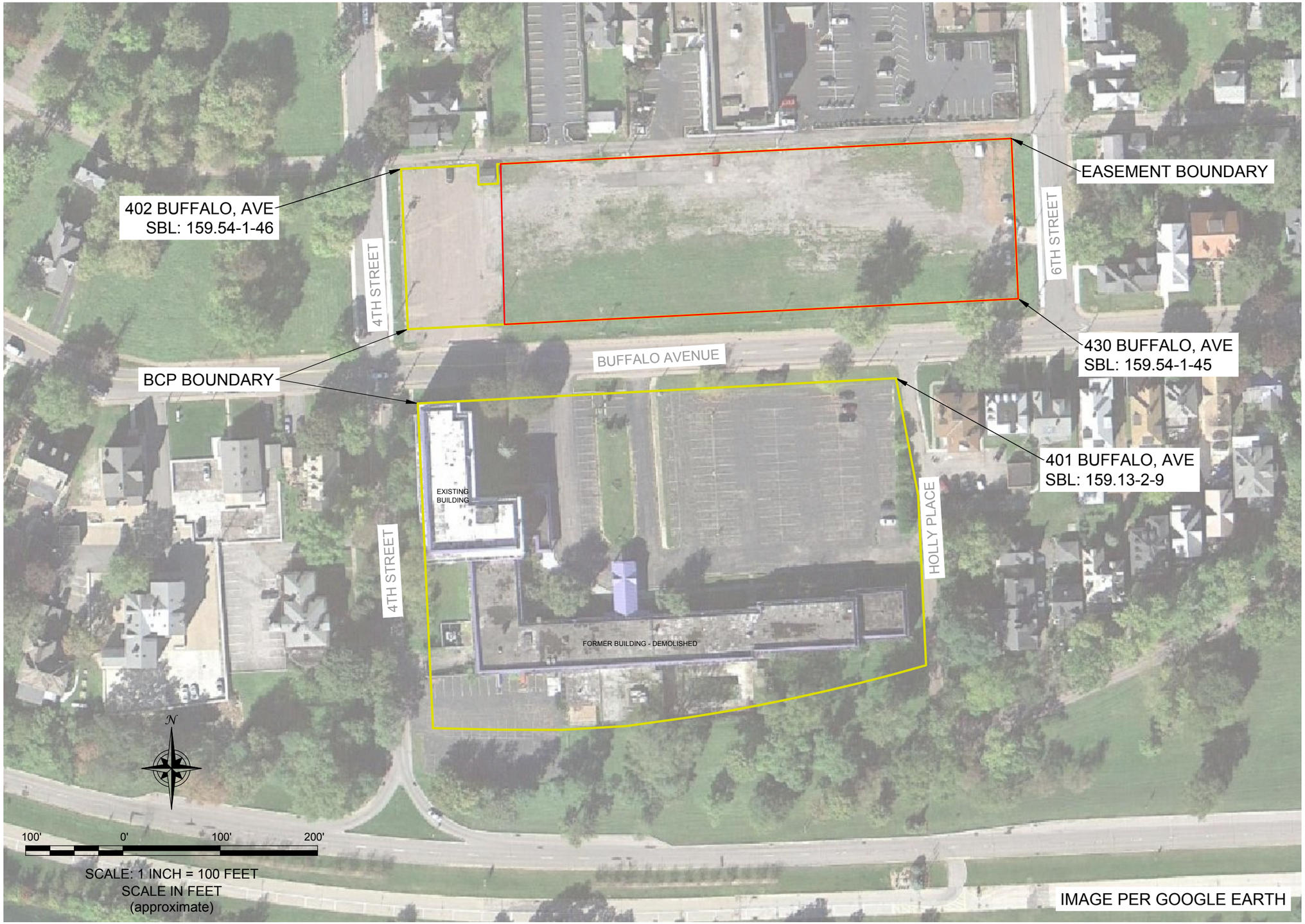
FINAL ENGINEERING REPORT

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\FER\Figure 2, Site Plan (Aerial).dwg



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TURNKEY ENVIRONMENTAL RESTORATION, LLC
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JOB NO.: 0294-013-001

SITE PLAN (AERIAL)

FINAL ENGINEERING REPORT
402 & 430 BUFFALO AVENUE SITE
BCP SITE No. C932164
NIAGARA FALLS, NEW YORK
PREPARED FOR
MERANI HOSPITALITY, INC.

FIGURE 2

F:\CAD\TurnKey\Merani Hospitality\401, 402, and 430 Buffalo Ave\FER\Figure 3: Groundwater Isopotential Map.dwg

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

573.7 MW-10

MW-5 572.2

570.3 MW-6

MW-9 574.4

MW-8 571.0

DRY MW-7

4TH STREET

6TH STREET

BUFFALO AVENUE

402 BUFFALO AVE

401 BUFFALO AVE

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

HOLLY PLACE

N

80' 0' 80' 160'

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

DATE: NOVEMBER 2015
DRAFTED BY: KRR

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TURNKEY ENVIRONMENTAL RESTORATION, LLC
2558 HAMBURG TURNPIKE, SUITE 300, BUFFALO, NY 14218, (716) 856-0599

JOB NO.: 0294-013-001

GROUNDWATER ISOPOTENTIAL MAP

FINAL ENGINEERING REPOT
402 & 430 BUFFALO AVENUE SITE
BCP SITE No. C932164
NIAGARA FALLS, NEW YORK
PREPARED FOR
MERANI HOSPITALITY, INC.

FIGURE 3

F:\CAD\TurnKey\Merani Hospitality\401, 402, and 430 Buffalo Ave\FER\Figure 4, RI Sample Locations.dwg

LEGEND:

- BCP BOUNDARY
- PARCEL BOUNDARY
- TP-25 RI TEST PIT LOCATIONS
- SS-7 RI SURFACE SOIL LOCATIONS
- SB-10 RI SOIL BORING LOCATIONS
- MW-1 RI MONITORING WELL LOCATIONS
- TP-3 HISTORIC INVESTIGATION LOCATIONS
- ELEVATED RADIOLOGIC FIELD READING ABOVE BACKGROUND)

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

MW-1 / SB-17
SS-1
PAVEMENT
TP-10
EXISTING BUILDING
MW-2
SB-18
TP-11
TP-12
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: NOVEMBER 2015
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TURNKEY ENVIRONMENTAL RESTORATION, LLC

JOB NO.: 0294-013-001

REMEDIAL INVESTIGATION SAMPLE LOCATIONS

FINAL ENGINEERING REPORT
402 & 430 BUFFALO AVENUE SITE
BCP SITE No. C932164
NIAGARA FALLS, NEW YORK
PREPARED FOR
MERANI HOSPITALITY, INC.

FIGURE 4

DATE: NOVEMBER 2015
DRAFTED BY: KRR

FIGURE 5

401 BUFFALO AVENUE IRM ACTIVITIES (RECORD DRAWING)

FINAL ENGINEERING REPORT

402 & 430 BUFFALO AVENUE SITE
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