NEW YORK EXPRESS DRY CLEANERS

QUEENS, NEW YORK

Final Engineering Report

NYSDEC BCP Number: C241050

Prepared for:

MacArthur Holding B, Inc.

140 South Dearborn Street, Suite 1100

Chicago, Illinois 60603

Prepared by:

MACTEC Engineering and Consulting, P.C.

453 Route 146 – Suite 201

Clifton Park, NY 12065

MAY 2016

CERTIFICATIONS

I, Brent O'Dell, 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 Remedial Action Work Plan (RAWP) was implemented and that all construction activities were completed in substantial conformance with the New York State Department of Environmental Conservation (NYSDEC)-approved RAWP.

I certify that the data submitted to the NYSDEC with this Final Engineering Report demonstrates that the remediation requirements set forth in the RAWP 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 Control, 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 the Engineering Control employed at the Site, including the proper maintenance of all remaining monitoring wells, and that such plan has been approved by NYSDEC.

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 NYSDEC.

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

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, Brent O'Dell, of MACTEC Engineering & Consulting, P.C. am certifying as Owner's Designated Site Representative for the site.

069876	6/3/16	
NYS Professional Engineer #	Date	Signature

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LIST OF ACRONYMS

Acronym	Definition
BCA	Brownfield Cleanup Agreement
BCP	Brownfield Cleanup Program
bgs	Below ground surface
CAMP	Community Air Monitoring Plan
CQAP	Construction Quality Assurance Plan
COC	Certification of Completion
ECL	Environmental Conservation Law
ESA	Environmental Site Assessment
FER	Final Engineering Report
HASP	Health and Safety Plan
IAQ	Indoor Air Quality
IRM	Interim Remedial Measure
MHB	MacArthur Holding B.
NYSDEC	New York State Department of Environmental Conservation
NYSDOH	New York State Department of Health
O & M	Operation and Maintenance
PCE	Tetrachloroethene
QAPP	Quality Assurance Project Plan
RAO	Remedial Action Objectives
RAWP	Remedial Action Work Plan
RI	Remedial Investigation
scfpm	Standard cubic feet per minute
SCG	Standards, criteria, and guidelines
SoMP	Soil/Materials Management Plan
SMP	Site Management Plan
SRIWP	Supplemental Remedial Investigation Work Plan
SSDS	Sub Surface Depressurization System (SSDS)
SVE	Soil Vapor Extraction
SVOC	Semi-Volatile Organic Compounds
SWPPP	Storm Water Pollution Prevention Plan
TAGM	Technical Administrative Guidance Memorandum
TCE	Trichloroethylene
USGS	United States Geologic Survey
UST	Underground Storage Tank

UUSCOs	Unrestricted Use Soil Cleanup Objectives
VOC	Volatile Organic Compound

FINAL ENGINEERING REPORT

1.0 BACKGROUND AND SITE DESCRIPTION

MacArthur Holding B, Inc. (MHB) entered into a Brownfield Cleanup Agreement (BCA) with the New York State Department of Environmental Conservation (NYSDEC) to remediate an approximately 0.03-acre property located in Fresh Meadows, Queens, New York. This BCA required the Remedial Party, MHB, to investigate and remediate contaminated media at the Site. Figure 1 presents the Site's location and Figure 2 presents the boundaries of this approximately 0.03-acre area subject to this report and referred to as the Site. The Site was remediated to Track 2 residential use (which also allows restricted residential, commercial and industrial use) and will continue to be used as part of a commercial shopping center (the 73rd Avenue Shopping Center).

The Site is located in the County of Queens, Fresh Meadows, Queens, New York and is identified as a portion of Block 7115 and Lot 30 on the Queens Tax Map. Figure 1 shows the location of the Site on the United States Geological Survey (USGS) topographical 7.5' Jamaica quadrangle. The Site is situated on an approximate 3.5-acre property bounded by an entrance/exit driveway to the north, 73rd Avenue to the south, 188th Street to the east, and a building occupied by an automotive repair facility and pre-school to the west. Figure 2 shows the Site plan and adjacent properties. The boundaries of the Site are fully described in Appendix A, Metes and Bounds.

An electronic copy of this Final Engineering Report (FER) with all supporting documentation is included as Appendix B.

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 Site.

2.1.1 Soil

RAOs for Public Health Protection

- Prevent inhalation of or exposure from contaminants volatilizing from contaminants in soil.

2.1.2 Soil Vapor

RAOs for Public Health Protection

- Mitigate impacts to public health resulting from existing, or the potential for, soil vapor intrusion into buildings adjacent to the Site.

2.2 DESCRIPTION OF SELECTED REMEDY

In March 2002, the NYSDEC and MHB executed a Voluntary Cleanup Agreement (VCP) for the remediation at the Site. A SVE system was designed and installed at the Site in January 2006 under the VCP to remediate the PCE and TCE impacted soil beneath the Site. The system was designed to extract soil vapor from two extraction wells, SVE-1 and SVE-2, which are approximately 38 feet in depth and are screened at approximately 6 feet to 38 feet bgs. The SVE system was operated for about five years (2006 through 2010). SVE influent sample results indicated there was a significant reduction in the level of VOC in the SVE influent samples since system operation started. In July 2011, sub slab vacuum measurements were obtained from beneath the basement concrete slabs of Rite Aid Pharmacy, former Blockbuster Video, and CitiBank to demonstrate the creation of a vacuum beneath the slabs by the operation of the SVE system. Following this demonstration of vacuum influence, the SVE system was approved by the NYSDOH

for conversion into a SSDS. The SSDS uses the same equipment as the SVE system and has the same operational parameters as the SVE system.

The Site was remediated in accordance with the remedy selected by the NYSDEC in the Remedial Action Work Plan (RAWP) dated July 2013 and the Decision Document (DD) dated October 2013. The factors considered during the selection of the remedy are those listed in 6 NYCRR 375-1.8.

The following are the components of the selected remedy:

- Continued operation of an sub slab depressurization system (SSDS) (which was previously installed as a soil vapor extraction system);
- Execution and recording of an Environmental Easement to restrict land use and prevent future exposure to any contamination remaining at the Site;
- Development and implementation of a Site Management Plan (SMP) for long term management of potential remaining contamination as required by the Environmental Easement, which includes plans for: (1) EC and ICs, (2) monitoring, (3) operation and maintenance and (4) reporting; and,
- Periodic certification of the EC and ICs listed above.

3.0 DESCRIPTION OF REMEDIAL ACTIONS PERFORMED

Remedial activities completed at the Site were conducted in accordance with the NYSDEC-conditionally approved Remedial Investigation/Remedial Action Workplan (RI/RAW) for the New York Express Dry Cleaners dated July 2013, the NYSDEC-approved RAWP for the New York Express Dry Cleaners dated July 2013, and the Decision Document dated October 2013. No deviations from the RI/RAW and RAWP were made.

3.1 INTERIM REMEDIAL MEASURES

A soil vapor extraction (SVE) test was conducted during the period from May to October 2004 by connecting a portable SVE system to one of two vapor extraction wells (SVE-1 and SVE-2) and collecting field data for air flow rates, vacuum influence, and VOC concentrations. Significant vacuum influence was measured in all test wells, indicating a relatively large radius of influence (approximately 110 feet). Based on the testing with the portable SVE system, a SVE system was designed and installed at the Site in January 2006 to remediate the chlorinated solvent impacted soil in the area of concern. The system was designed to extract soil vapor from two extraction wells, SVE-1 and SVE-2, which are approximately 38 feet in depth and are screened at approximately 6 feet to 38 feet below ground surface (bgs). A Rotron® six horsepower regenerative blower was used for the vacuum extraction of soil vapor. The SVE system operated at approximately 80 inches (in.) water column (w.c.) to 100 in. w.c. and produces 80 standard cubic feet per minute (scfm).

The SVE system was operated for about five years (2006 through 2010). The SVE influent sample results indicated there was a significant reduction in the level of VOC in the SVE influent samples since system operation started. PCE decreased from 81,374 $\mu g/m^3$ in October 2004 (collected during a pilot study) to 1,670 $\mu g/m^3$ in September 2009; while, TCE decreased from 6,449 $\mu g/m^3$ to 93 $\mu g/m^3$ and cis-DCE from 5,700

$\mu g/m^3$ to 80.1 $\mu g/m^3$ during the same period. Indoor air quality (IAQ) sampling slab soil conducted in the basement spaces of the CitiBank, former Blockbuster Video, and the Rite Aid Pharmacy during the heating seasons of 2010 evidenced no exceedance of the NYSDOH indoor air guideline of 30 $\mu g/m^3$ for PCE and 2 $\mu g/m^3$ for TCE.

In July 2011, sub slab vacuum measurements were obtained from beneath the basement concrete slabs of Rite Aid Pharmacy, former Blockbuster Video, and CitiBank to demonstrate the creation of a vacuum beneath the slabs by the operation of the SVE system. Following this demonstration of vacuum influence, the SVE system was approved by the NYSDOH for conversion into a SSDS. The SSDS uses the same equipment as the SVE system and has the same operational parameters as the SVE system.

3.2 GOVERNING DOCUMENTS

3.2.1 Site Specific Health & Safety Plan (HASP)

All remedial work performed under this Remedial Action was in full compliance with governmental requirements, including Site and worker safety requirements mandated by Federal Occupational Safety and Health Administration (OSHA).

A Health and Safety Plan (HASP) was complied with for all remedial and invasive work performed at the Site. An example of a HASP used for the Site is in Appendix C of the SMP.

3.2.2 Quality Assurance Project Plan (QAPP)

The QAPP provided a framework of procedures, functional activities, and organization to be used during the execution of environmental work at this Site. The procedures and criteria outlined in the QAPP described the level of performance required to achieve the project objectives.

The objectives of the QAPP were as follows:

- Provide a consistent framework for collecting samples and generating analytical data throughout the project;
- Identify detection limit and quality control (QC) goals for analytical methodologies used to generate chemistry data;
- Set forth review procedures used to demonstrate that the analytical systems are achieving project objectives;
- Set forth record-keeping procedures for field activities, sample collection and handling, and analytical data reporting;
- Provide for generation and documentation of data of known and acceptable quality; and,
- Set forth procedures that limit the effect of non-laboratory activities on analytical data.

The QAPP assured the documentation of Site activities so that field and analytical measurements could be verified. Quality assurance (QA) activities included the use of a management system to produce valid data in support of the program and a system of checks and reports that monitored the attainment of data quality objectives (DQOs). This management system included plans that allowed for the traceability, completeness, and security of field and analytical documents, procedures, and the evaluation of data quality relative to DQOs. QC included specific technical activities performed by field or laboratory personnel to demonstrate that system performance was maintained within established criteria. QC activities were included within this QA system to document precision, accuracy, and comparability of results.

3.2.3 Community Air Monitoring Plan (CAMP)

A Community Air Monitoring Plan (CAMP) was prepared prior to conducting a Supplemental Remedial Investigation (SRI) in July and August 2011 because there was some potential remaining contamination in soil. The CAMP required real-time monitoring for volatile and semi-volatile organic compounds (VOCs and SVOCs) and

particulates (i.e., dust) at the downwind perimeter of the Site when investigation activities were in progress. The CAMP was not intended for use in establishing action levels for worker respiratory protection. Rather, its intent was to provide a measure of protection for the downwind community (i.e., off-site receptors including residences and businesses and onsite workers not directly involved with invasive activities) from a potential airborne contaminant. The action levels in the CAMP required increased monitoring, corrective actions to abate emissions, and/or work shutdown. Additionally, the CAMP helped to confirm that work activities did not spread contamination off-site through the air.

3.2.4 Citizen Participation Plan

The purpose of the Citizen Participation Plan (CP Plan) for the Site was to provide information that would promote and facilitate citizen participation as required in the legislation that created the Brownfields Cleanup Program (BCP). MHB performed environmental investigations and remediation on the Site to characterize and remove organic constituents identified in the soil that were associated with dry cleaning operations.

The objectives of the CP Plan were as follows:

1. Inform the public of planned and/or ongoing actions, the nature of environmental conditions, responses under consideration, and progress;
2. Create opportunities for the public to provide information, opinions and perspectives on the Site's technical decisions;
3. Ensure open communication among the public, the project staff, and state/local decision makers throughout the remedial progress; and
4. Coordinate public outreach efforts within the involved governmental agencies to best serve the public.

Opportunities for public participation were provided when notices announcing investigative and remedial activities were published in the Environmental Notice

Bulletin. Opportunities for public participation were provided when Fact Sheets were distributed that discussed the proposed plans for investigation or remediation.

MHB has prepared a Site Contact List which included the names of persons required by the BCP to be included on the Site Contact List. This list will be updated as necessary to include the names of any parties that identify themselves to MHB or NYSDEC as interested in being on the list.

MHB also established a public document repository at which it placed copies of documents and other information pertaining to the investigation and remediation of the Site, including technical data and reports submitted to the NYSDEC. The information was kept current and included reports, data, maps and other information gathered during the various stages of investigative and remedial activities at the Site. Fact Sheets were also available at the repository. The repository for the Site is listed below:

Queens Borough Public Library
The Central Library
89-11 Merrick Boulevard
Jamaica, New York 11432
(718) 990-0778

Hours: Monday-Friday 9:00 am - 9:00 pm,
Saturday 10:00am - 5:30 pm, and
Sunday 12:00 pm -5:00 pm

In addition, complete project records were also kept at the following location:

NYSDEC Region 2 Office
47-40 21st Street
Long Island City, New York 11101
Telephone: (718) 482-4897

Hours: Monday-Friday 9:00 am – 3:00 pm
By appointment only, call Ms. Mandy Yau

4.0 REMEDIAL PROGRAM ELEMENTS

4.1 CONTRACTORS AND CONSULTANTS

A listing of contractors who performed work at the Site and their associated tasks is presented below:

- S & D Environmental Services, Inc., Edison, New Jersey / UST removal contractor:
- TPI Environmental, Inc., New Hope, Pennsylvania / Utility location and drilling services;
- Northgate Electric Corporation, New York, New York / Electrical contractor service;
- Zebra Environmental Corporation, Lynbrook, New York / Utility location and drilling services;
- Pioneer Paving Inc., Kings Park, New York / Asphalt paving services; and,
- Aquifer Drilling and Testing, Inc., New York, New York / Drilling services.

The certifying Engineer of Record for the work was Brent O'Dell, P.E.

4.2 SITE PREPARATION

Generally, the work performed at the Site required the following tasks:

- Mobilization;
- Overhead and subsurface utility clearance; and,
- Acquisition of NYSDEC and NYSDOH approvals.

4.2.1 General Site Controls

Highly visible and reflective traffic control cones were used to provide site safety and security during remedial activities at the Site. Remedial activities were documented in a dedicated field logbook. Equipment was decontaminated prior to entering the Site, during its use on the Site, and following its use. Soil was screened with a photoionization detector (PID) during all invasive subsurface remedial activities. Soil cuttings from borings were screened and placed in 55-gallon drums for storage and disposal, if PID readings indicated high readings.

4.2.2 CAMP results

The air monitoring performed during the SRI in July and August 2011 did not indicate any exceedance of action levels and did not require response actions.

The results of the SRI were reported daily to the NYSDEC via email during the investigation. Later the procedures, results, and conclusions of the SRI were presented in a report dated September 2, 2011. Monthly Progress Reports are prepared and submitted monthly to the NYSDEC.

4.3 REMEDIAL PERFORMANCE/DOCUMENTATION SAMPLING

An out of service 1,250-gallon heating oil underground storage tank (UST) was removed from the Site in November 1997. No oil staining or indications of light non-aqueous phase liquids (LNAPL) were observed within the tank bed; however, evidence of chlorinated VOC, including tetrachloroethene (PCE) and trichloroethene (TCE), contamination was detected in surrounding soils. Based on observations during UST removal and the analytical results of the soil samples, MHB notified the NYSDEC Spills and Remediation Division and Spills Hotline of an apparent release (NYSDEC Spill # 97-096 84).

It was concluded that a spill or spills of PCE and TCE occurred in the vicinity of the former UST and that the likely source of these compounds was not the subject tank. The soils overlying the tank and immediately below the concrete sidewalk appeared to be solvent contaminated and the residual tank fluid and wastes were primarily oily water and petroleum sludge. Approximately 30 to 40 cubic yards of soil, including contaminated soil, was removed during UST closure activities and disposed offsite; however, due to access restrictions created by the building and building foundations, remedial excavation was limited and a portion of the impacted soils could not be removed.

In March 2002, the NYSDEC and MHB executed a Voluntary Cleanup Agreement for the remediation at the Site.

A SVE system was designed and installed at the Site in January 2006 to remediate the PCE and TCE impacted soil beneath the Site. The system was designed to extract soil vapor from two extraction wells, SVE-1 and SVE-2, which are approximately 38 feet in depth and are screened at approximately 6 feet to 38 feet bgs. A Rotron® six horsepower regenerative blower was used for the vacuum extraction of soil vapor. The SVE system operated at approximately 80 inches (in.) w.c. to 100 in. w.c. and produced 80 standard cubic feet per minute (scfm).

In July and August 2011, a SRI was conducted. The results and conclusions of the SRI were presented in a report dated September 2, 2011 and are summarized below.

- The analytical results of confirmatory soil samples indicate that the SVE system installed as an IRM in January 2006 effectively remediated the VOCs previously detected in the soil beneath the Site, specifically TCE, PCE, cis-DCE, naphthalene, and sec-butyl benzene. Figure 3 presents the 2011 SRI soil sample analytical results.
- Benzo(a)anthracene, benzo(a)pyrene, and chrysene were detected in soil sample SB-1 (15 – 15.5) at concentrations exceeding their respective UUSCOs, near the former fuel oil UST area located adjacent to the northwestern corner of New York Express.

- Based on the results of sub-slab vacuum measurements, it was determined that the SVE system adequately depressurized the slab beneath the adjacent retail stores and will effectively control the potential migration of VOCs in soil gas. Figure 4 presents a summary of the 2011 SRI soil vapor analytical results.
- The soil vapor extraction (SVE) system was converted into a SSDS to create negative pressure in the soil beneath the slab of the adjacent retail stores and thereby preclude vapor intrusion from any potential remaining contamination at the Site.
- Concentrations of VOC in groundwater decreased significantly to below the NYSDEC Technical and Operational Guidance Series (TOGS) Ambient Water Quality Standards and Guidance Values since the groundwater samples that were collected in September and October 2004 and the operation of the SVE system. Figure 5 presents a summary of the 2011 SRI groundwater analytical results.

Table 1 presents a summary of the analytical results for soil samples, Table 2 presents a summary of IAQ, sub-slab and outdoor sample analytical results, and Table 3 presents a summary of groundwater sample analytical results.

4.4 CONTAMINATION REMAINING AT THE SITE

The analytical results of the post remediation confirmatory soil sampling program indicated that only the SVOCs benzo(a)anthracene, benzo(a)pyrene, and chrysene were detected at concentrations that exceeded utilized unrestricted soil cleanup objectives (UUSCOs). These SVOCs were detected in only one soil sample, SB-1 (15 – 15.5), which was collected from boring SB-1 in native soil at a depth interval of 15 to 15.5 feet bgs. No other parameters, including PCE and TCE, metals, pesticides, and PCB, were detected in any of the soil samples at concentration that exceeded the UUSCOs. Figure 3 presents the analytical results of the post remediation confirmatory soil sampling program.

Since potential remaining contaminated soil and soil vapor remains beneath the Site after completion of the Remedial Action, an EC and ICs are required to protect human health and the environment. The EC and ICs are described in the following sections. Long-

term management of the EC and ICs and potential remaining contamination will be performed under the SMP approved by the NYSDEC.

4.5 SSDS

The SVE system was converted to an SSDS to mitigate possible soil vapor intrusion into the basements of the adjacent retail stores by creating negative pressure in the soil beneath the basements. The SSDS was designed to extract soil vapor from two extraction wells, SVE-1 and SVE-2. The SVE wells are approximately 38 feet in depth and are screened at approximately 6 feet to 38 feet bgs. A Rotron six horsepower regenerative blower is used for the vacuum extraction of soil vapor. The SSDS operates at approximately 80 inches water column to 100 inches water column and produces 80 standard cubic feet per minute (scfm). The SSDS radius of influence was previously demonstrated to extend 90 to 100 feet beyond the Site. As-built drawings of the former SVE, now SSDS are in Appendix D.

Sub slab vacuum measurements were obtained from beneath the basement concrete slabs of the adjacent retail stores in July 2011 to confirm vacuum beneath the slabs by the operation of the SVE system. Following this demonstration of vacuum influence, the SVE was approved by the NYSDEC and NYSDOH to operate as an SSDS. The SSDS has been in operation at the Site since July 2011.

The SSDS is a simple and reliable system, with few operation and maintenance requirements. The system consists of a Rotron six horsepower regenerative blower, an electric/control panel, an extraction influent side, and an effluent discharge side. The extraction influent side has the following components:

- Two extraction piping lines, one line to each of the two extraction wells, SVE 1 and SVE 2;
- Two motor operated valves, one valve on each extraction influent piping line;

- A water/moisture knockout tank to which the extraction piping lines are manifolded;
- A vacuum gauge on the extraction influent line between the knockout tank and the regenerative blower;
- A discharge line between the knockout tank and a granular activated carbon (GAC) water treatment drum;
- A transfer pump affixed to the discharge line between the knockout tank and the GAC drum; and,
- A short length of extraction piping between the knockout tank and the blower, with a vacuum gauge.

The discharge effluent side has the following components:

- A discharge piping line, with an air flow gauge; and,
- A vent line.

The SSDS is within a lockable metal shed, which is enclosed by a six-foot high gated and lockable chain link fence.

The SSDS has been in almost continual operation since August 2011. In the fall of 2012, the SSDS shut down as a result of power loss due to Hurricane Sandy, but was soon restarted. The startup procedures for the SSDS are as follows:

Check to see if there is power to the electric/control panel;

- If there is no electric power to the system, but there is electric power to the shopping center, make sure the activation switch is in the off position, check the electric panel in the basement of the former New York Express Cleaners and if the breaker switch is off, put it in the on position; and,
- If there is electric power, check for an alarm condition on the electric/control panel, and if there is an alarm condition, make sure the activation switch is in the off position, press the reset button, and turn the activation switch to the automatic position.

Once the SSDS has been restarted, the following testing should be performed:

- Listen for audible sounds of operation and wear on the regenerative blower;
- Check for flow in the piping lines; and,
- Inspect the system gauges (vacuum and air flow gauges) for readings.

An Operation and Maintenance Manual is kept in the metal shed with the SSDS.

The primary routine operation and maintenance duties of the SSDS are as follows:

- Check for alarms on the electric/control panel;
- Listen for audible sounds of operation and wear on the regenerative blower;
- Inspect the extraction influent, effluent discharge piping, and other lines for any distortion, leaks, or vibrations and check for flow from the effluent vent line;
- Check for flow through the two motor operated valves on the extraction influent piping lines;
- Inspect the vacuum gauge vacuum gauge on the extraction line between the knockout tank and the regenerative blower;
- Read the vacuum gauge and compare the vacuum reading to previous readings;
- Inspect the air flow gauge on the discharge effluent line between the blower and the vent line;
- Read the air flow gauge and compare the air flow reading to previous readings;
- Check the water/moisture knock out tank for any water; and;
- Check the high level switch (in the knockout tank) and transfer pump for operation and listen for audible sounds of operation and wear.

An Operation and Maintenance Manual is kept in the metal shed with the SSDS.

Routine maintenance will be performed quarterly or when the system alarms (either as a result of a malfunction or severe weather conditions).

There is little equipment maintenance associated with the SSDS. The primary routine equipment maintenance duties of the SSDS are as follows:

- Inspect the filters in the two motor operated valves on the extraction influent lines, and clean, if necessary;
- Inspect the filter in the pressure relief valve on the regenerative blower and clean, if necessary; and,
- Inspect the filters in any solenoid valves and clean, if necessary.

An Operation and Maintenance Manual, with the manufacture's equipment maintenance recommendations is kept in the metal shed with the SSDS.

Routine maintenance will be performed every two years or when routine operation inspections indicate a possible problem with the equipment.

The primary non-routine equipment maintenance duties of the SSDS are as follows:

- Damage to the SSDS as a result of vandalism or severe weather conditions, such as electrical power surges or flooding;
- Reduced effectiveness as a result of piping line blockage or equipment malfunctions; and.
- Component replacement due to breakage.

Generally, remedial processes are considered completed when effectiveness monitoring indicates that the remedy has achieved the remedial action objectives identified by the decision document, which is to mitigate impacts to public health resulting from existing, or the potential for, soil vapor intrusion into buildings. The framework for determining when remedial processes are complete is provided in Section 6.6 of NYSDEC DER-10.

After conferring with the NYSDEC and NYSDOH, IAQ and sub slab soil vapor samples will be collected from the basements of the Rite Aid Pharmacy, former Blockbuster Video, and CitiBank. The results of three consecutive rounds of IAQ and sub slab sampling, conducted during heating seasons and following a temporary shutdown of the SSDS, will be used to help determine whether the concentrations of PCE and TCE are preventative of the potential for soil vapor intrusion and protective of human health.

Approval from the NYSDEC and NYSDOH to terminate SSDS operation will be based on the data and site specific considerations.

The active SSDS will not be discontinued unless prior written approval is granted by the NYSDEC and NYSDOH. In the event that monitoring data indicates that the SSDS is no longer required, a proposal to discontinue the SSDS will be submitted by MHB to the NYSDEC and NYSDOH.

4.6 INSTITUTIONAL CONTROLS

A series of ICs are required to: (1) implement, maintain and monitor an EC system; (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 residential, restricted residential, commercial and industrial uses only. Adherence to these ICs on the Site is required by the Environmental Easement and will be implemented under this Site Management Plan. These ICs are as follows:

- Compliance with the Environmental Easement and the SMP by the Grantor and the Grantor's successors and assigns;
- The EC (the SSDS) must be operated and maintained as specified in the SMP for the Site;
- The EC on the Site must be inspected at a frequency and in a manner defined in the SMP for the Site;
- Soil vapor monitoring must be performed as defined in the SMP for the Site;
- Data and information pertinent to the management of the Site must be reported at the frequency and in a manner defined in the SMP.

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

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

- The Site may only be used for residential, restricted residential, commercial and industrial uses provided that the long-term EC and ICs included in the SMP for the Site are employed.
- All future activities on the Site that will disturb remaining contaminated material must be conducted in accordance with the SMP for the Site;
- The use of the groundwater underlying the Site is prohibited without treatment rendering it safe for intended use;
- MHB will submit to NYSDEC a written statement that certifies, under penalty of perjury, that: (1) controls employed at the Site are unchanged from the previous certification or that any changes to the controls were approved by the NYSDEC; and, (2) nothing has occurred that impairs the ability of the controls to protect public health and environment or that constitute a violation or failure to comply with the SMP. NYSDEC retains the right to access the Site at any time in order to evaluate the continued maintenance of any and all controls. This certification shall be submitted annually, or an alternate period of time that NYSDEC may allow and will be made by an expert that the NYSDEC finds acceptable.

The environmental easement for the site was executed by the NYSDEC on June 15, 2015, and filed with the Office of the City Register on April 12, 2016. The County Recording Identifier number for this filing is 2016000127317. A copy of the easement and proof of filing is provided in Appendix A.

4.7 DEVIATIONS FROM THE REMEDIAL ACTION WORK PLAN

There were no deviations from the RAWP.

TABLES

Table 1 - Summary of the Analytical Results for Soil Samples
New York Express Dry Cleaners
Fresh Meadows, New York

MACTEC Sample ID:	NYSDEC Unrestricted Use Soil Cleanup Objectives (375-6.8(b))	NYSDEC Restricted Use Soil Cleanup Objectives for Commercial Areas (375-6.8(b))	NYSDEC Restricted Use Soil Cleanup Objectives Protection of Groundwater (375-6.8(a))	SB-1 (15-15.5)
Lab Sample ID:				JA82254-12
Date Sampled:				7/29/2011
Units:	mg/kg	mg/kg	mg/kg	mg/kg
Benzo(a)anthracene	1	5.6	1	**1.53**
Benzo(a)pyrene	1	1	22	**1.36**
Benzo(b)fluoranthene	1	5.6	1.7	1.36
Benzo(k)fluoranthene	0.8	56	1.7	0.917
Chrysene	1	56	1	**1.52**
Indeno (1,2,3-cd)pyrene	0.5	5.6	8.2	0.717

Notes:
Analysis results are shown in milligrams per kilogram (mg/kg).
Bold-faced and underlined type indicates sample exceeded either Restricted Use Soil Cleanup Objectives (SCO) for Commercial Areas or Protection of Groundwater.

Prepared/Date: VMB 8/25/2011
Checked/Date: DMS 9/2/2011

Table 2: Summary of IAQ and Sub-Slab Results
New York Express Dry Cleaners
Fresh Meadows, New York

	NYSDOH Air Background Values (ug/m^3)	NYSDOH Air Guideline Values (ug/m^3)	Citibank								
			IAQ					Subslab			
			2/16/2006	1/17/2007	3/10/2008	3/17/2009	3/30/2010	1/17/2007	3/11/2008	3/17/2009	3/30/2010
Compound (ug/m^3)											
Vinyl Chloride	<0.9	na	nd (0.54)	nd (0.040)	nd (0.51)	nd (0.51)	nd (0.51)	nd (0.040)	nd (4.1)	dn (2.0)	nd (0.51)
Trichloroethene	<1.2-1.2	5	0.70	0.64	0.81 J	nd (0.21)	1	1.8	nd (8.6)	nd (0.86)	0.70
Tetrachloroethene	<1.9-5.9	100	11	15	18	13	12	140	6.3 J	23	129

	NYSDOH Air Background Values (ug/m^3)	NYSDOH Air Guideline Values (ug/m^3)	Blockbuster									
			IAQ						Subslab			
			2/16/2006	2/16/2006 (dup)	1/17/2007	3/10/2008	3/17/2009	3/30/2010	1/17/2007	3/11/2008	3/17/2009	3/30/2010
Compound (ug/m^3)												
Vinyl Chloride	<0.9	na	nd (0.47)	nd (0.47)	0.15	nd (0.51)	nd (0.51)	nd (0.51)	nd (0.14)	nd (4.1)	nd (2.0)	nd (0.51)
Trichloroethene	<1.2-1.2	5	5.1	5.1	14	53	2.5	1.2	29	7	nd (0.86)	5.9
Tetrachloroethene	<1.9-5.9	100	12	12	20	12	5.7	2.8	620	53	6.8	243

	NYSDOH Air Background Values (ug/m^3)	NYSDOH Air Guideline Values (ug/m^3)	Rite Aid									
			IAQ					Subslab				
			2/16/2006	1/17/2007	3/10/2008	3/17/2009	3/30/2010	1/17/2007	1/17/2007 (dup)	3/11/2008	3/17/2009	3/30/2010
Compound (ug/m^3)												
Vinyl Chloride	<0.9	na	2.5	nd (0.043)	nd (0.51)	nd (0.51)	nd (0.51)	nd (0.042)	nd (0.042)	nd (280)	nd (2.0)	nd (1.4)
Trichloroethene	<1.2-1.2	5	2.7	3.7	3.7	7	0.43	4.2	4.1	nd (590)	10	12
Tetrachloroethene	<1.9-5.9	100	8.8	130	82.7	10	0.60	180	180	nd (750)	191	557

na not applicable
nd (0.054) indicates compound was not detected at the given minimum detection limit (MDL)
J indicates an estimated value
IAQ Indoor Air Quality

Prepared by: JG

Checked by: DMS

Table 3 - Summary of Groundwater Analytical Results
New York Express Dry Cleaner
Fresh Meadows, New York

Well ID:	NY Ambient	MW-1	MW-2	DUP-1 (MW-2)	MW-3	MW-4	MW-6
Sampling Date:	Water Quality Standards	8/10/2011	8/10/2011	8/10/2011	8/10/2011	8/10/2011	8/10/2011
Compound (ug/L)							
Chloroform	7	ND (1.0)	0.33 J	0.37 J	0.26 J	ND (1.0)	ND (1.0)
cis-1,2-Dichloroethene	3	ND (1.0)	0.47 J	0.61 J	ND (1.0)	ND (1.0)	ND (1.0)
Methyl Tert Butyl Ether	NS	1.4	0.39 J	0.39 J	1.3	ND (1.0)	0.42 J
Tetrachloroethene	5	ND (1.0)	4.8	4.5	1.6	2.4	1.2
Toluene	5	2.9	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
Trichloroethene	5	ND (1.0)	0.40 J	0.36 J	ND (1.0)	ND (1.0)	ND (1.0)

Prepared By: JMG 8/26/11
Checked By: DMS 8/27/11

NOTES:
Concentrations reported in micrograms per liter (ug/L).
Bold-typeface items indicate the analyte exceeds the NY TOGS for Ambient Water Quality Standards and Guidance Values.
J - Analyte was found at estimated values below the method detection limit.
NS - No Standard.

FIGURES

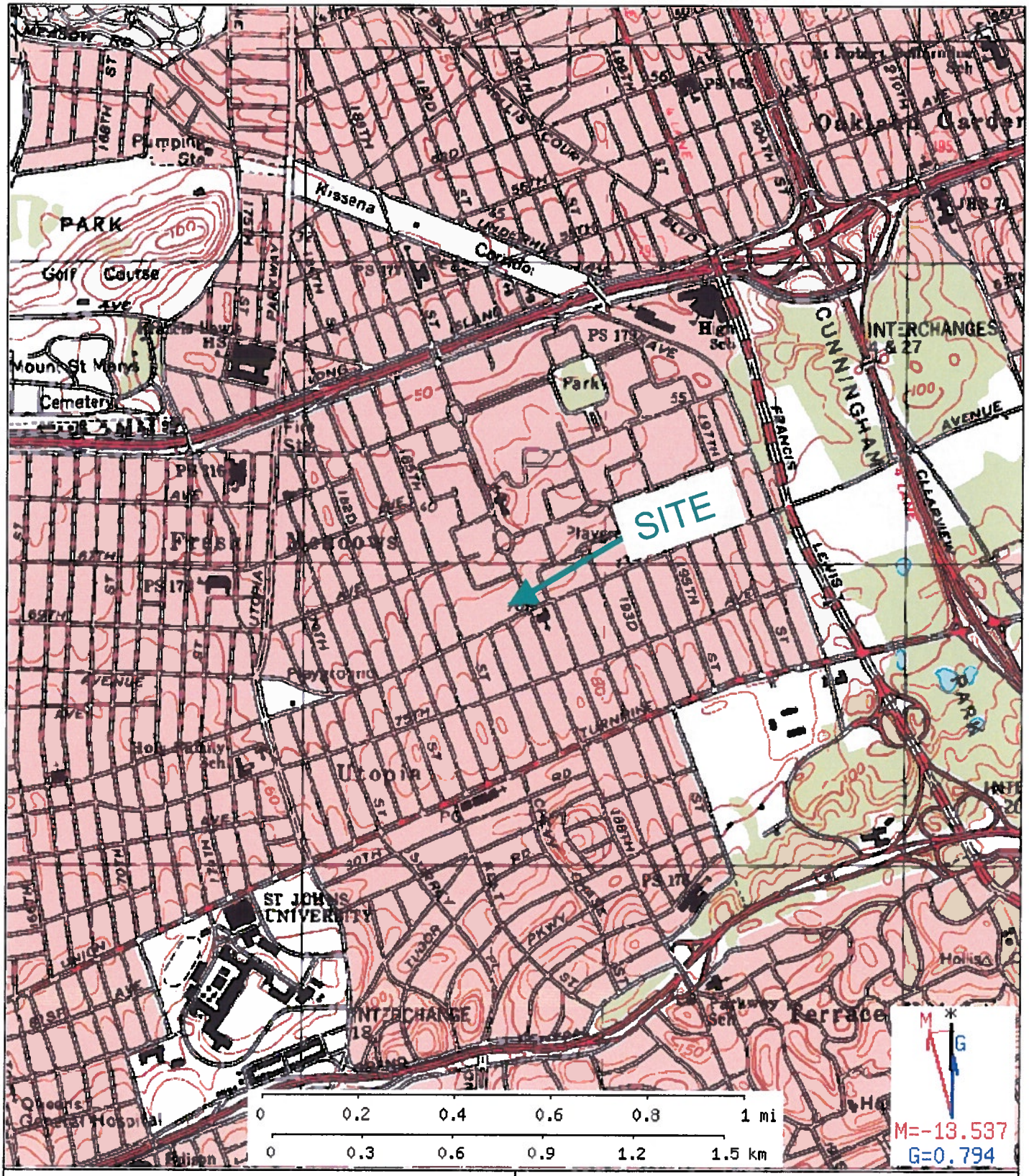

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FIGURE 1
SITE LOCATION MAP

FINAL ENGINEERING REPORT

New York Express Dry Cleaners
69-60 188th STREET, QUEENS, NEW YORK

MACTEC PROJECT NO.: 3485050051 DRN. BY: DS CHKD. BY: JG

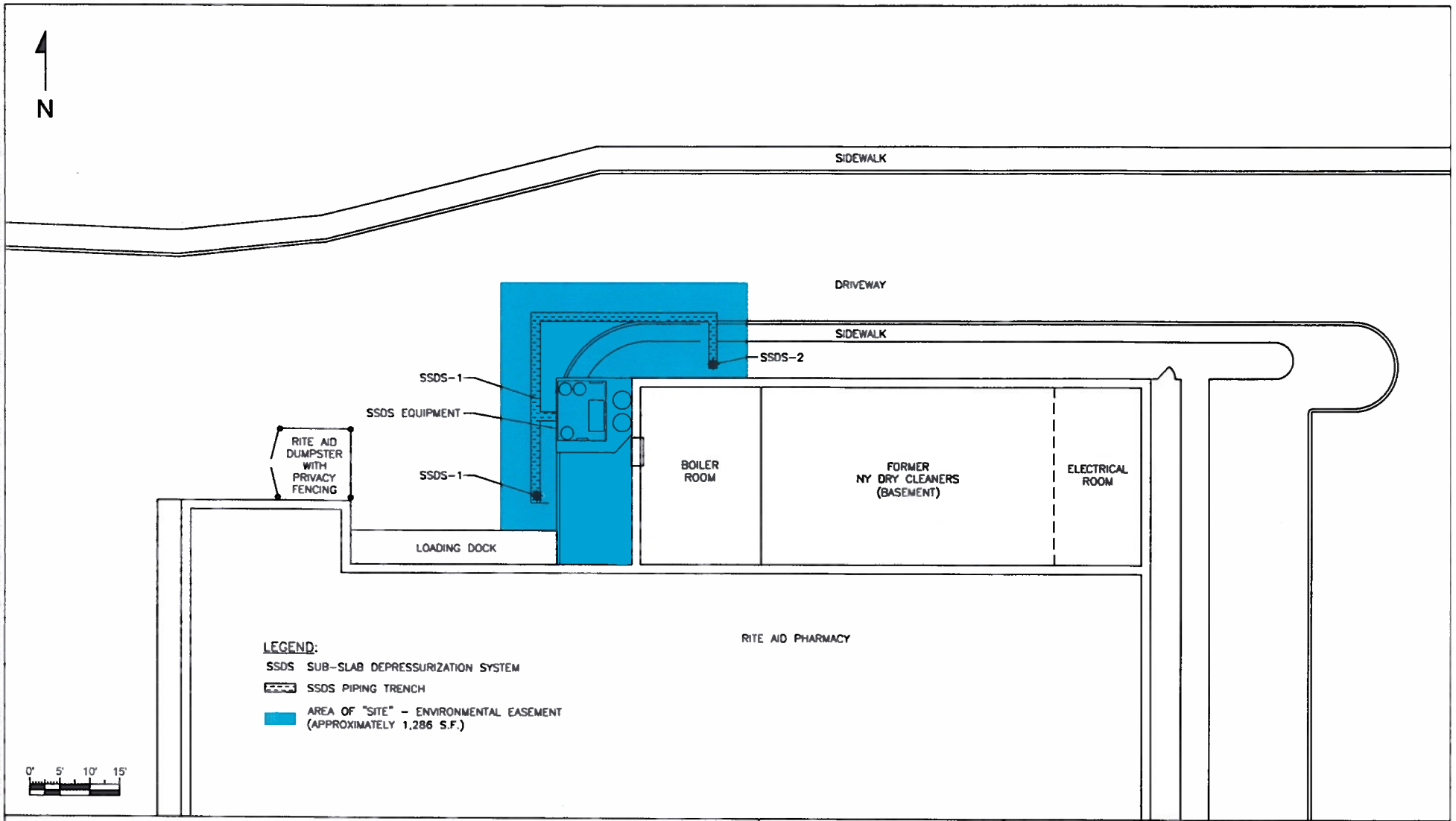

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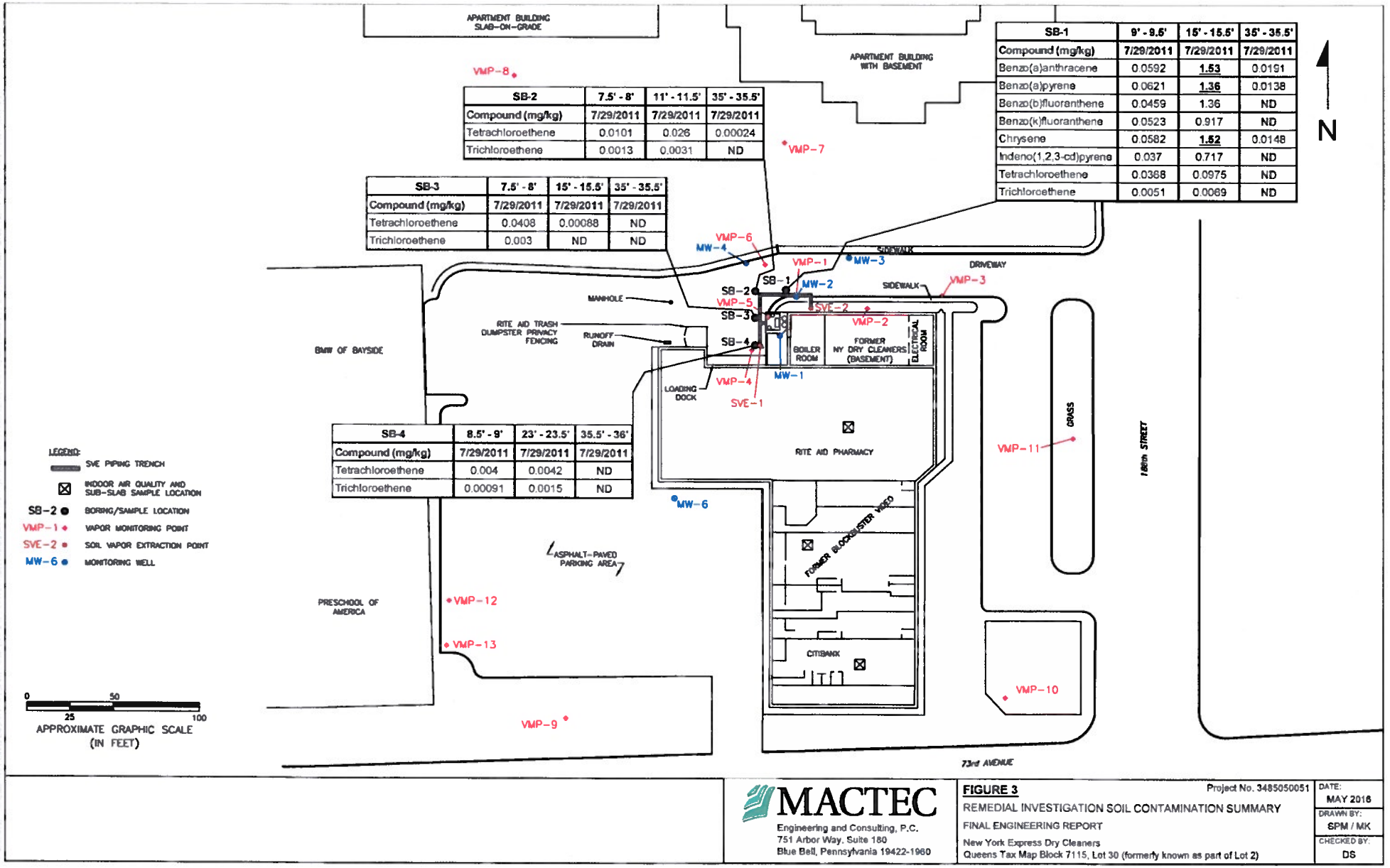
FIGURE 2
SITE FEATURES MAP
FINAL ENGINEERING REPORT
New York Express Dry Cleaners
Queens Tax Map Block 7115, Lot 30 (formerly known as part of Lot 2)

Project No. 3485050051

DATE: MAY 2016
DRAWN BY: JC / SPM
CHECKED BY: DS



SB-2	7.5' - 8'	11' - 11.5'	35' - 35.5'
Compound (mg/kg)	7/29/2011	7/29/2011	7/29/2011
Tetrachloroethene	0.0101	0.026	0.00024
Trichloroethene	0.0013	0.0031	ND

SB-3	7.5' - 8'	15' - 15.5'	35' - 35.5'
Compound (mg/kg)	7/29/2011	7/29/2011	7/29/2011
Tetrachloroethene	0.0408	0.00088	ND
Trichloroethene	0.003	ND	ND

SB-4	8.5' - 9'	23' - 23.5'	35.5' - 36'
Compound (mg/kg)	7/29/2011	7/29/2011	7/29/2011
Tetrachloroethene	0.004	0.0042	ND
Trichloroethene	0.00091	0.0015	ND

SB-1	9' - 9.5'	15' - 15.5'	35' - 35.5'
Compound (mg/kg)	7/29/2011	7/29/2011	7/29/2011
Benzo(a)anthracene	0.0592	**1.53**	0.0191
Benzo(a)pyrene	0.0621	**1.36**	0.0138
Benzo(b)fluoranthene	0.0459	1.36	ND
Benzo(k)fluoranthene	0.0523	0.917	ND
Chrysene	0.0582	**1.52**	0.0148
Indeno(1,2,3-cd)pyrene	0.037	0.717	ND
Tetrachloroethene	0.0368	0.0975	ND
Trichloroethene	0.0051	0.0089	ND

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FIGURE 3
REMEDIAL INVESTIGATION SOIL CONTAMINATION SUMMARY
FINAL ENGINEERING REPORT
New York Express Dry Cleaners
Queens Tax Map Block 7115, Lot 30 (formerly known as part of Lot 2)

Project No. 3485050051

DATE: MAY 2016
DRAWN BY: SPM / MK
CHECKED BY: DS

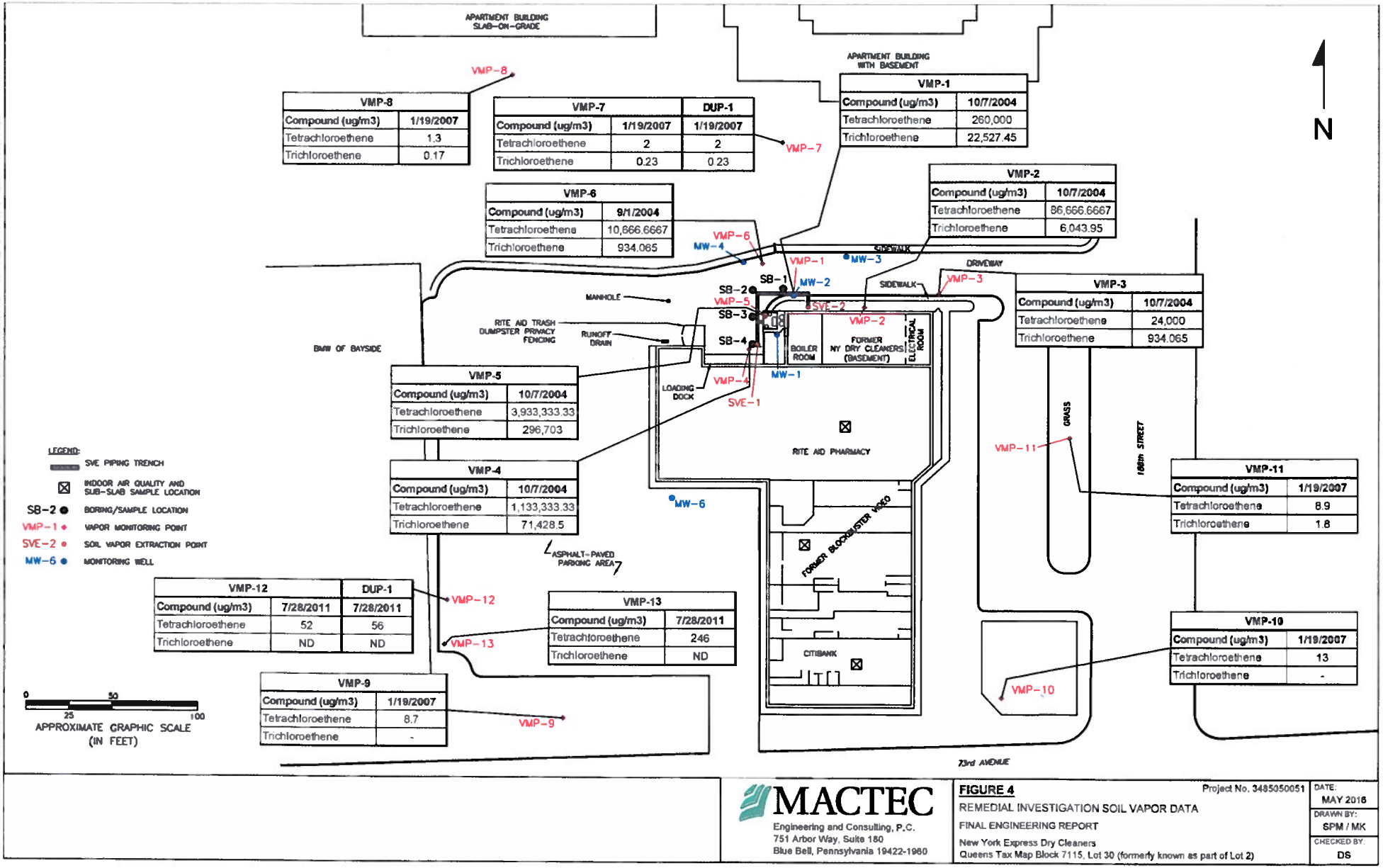

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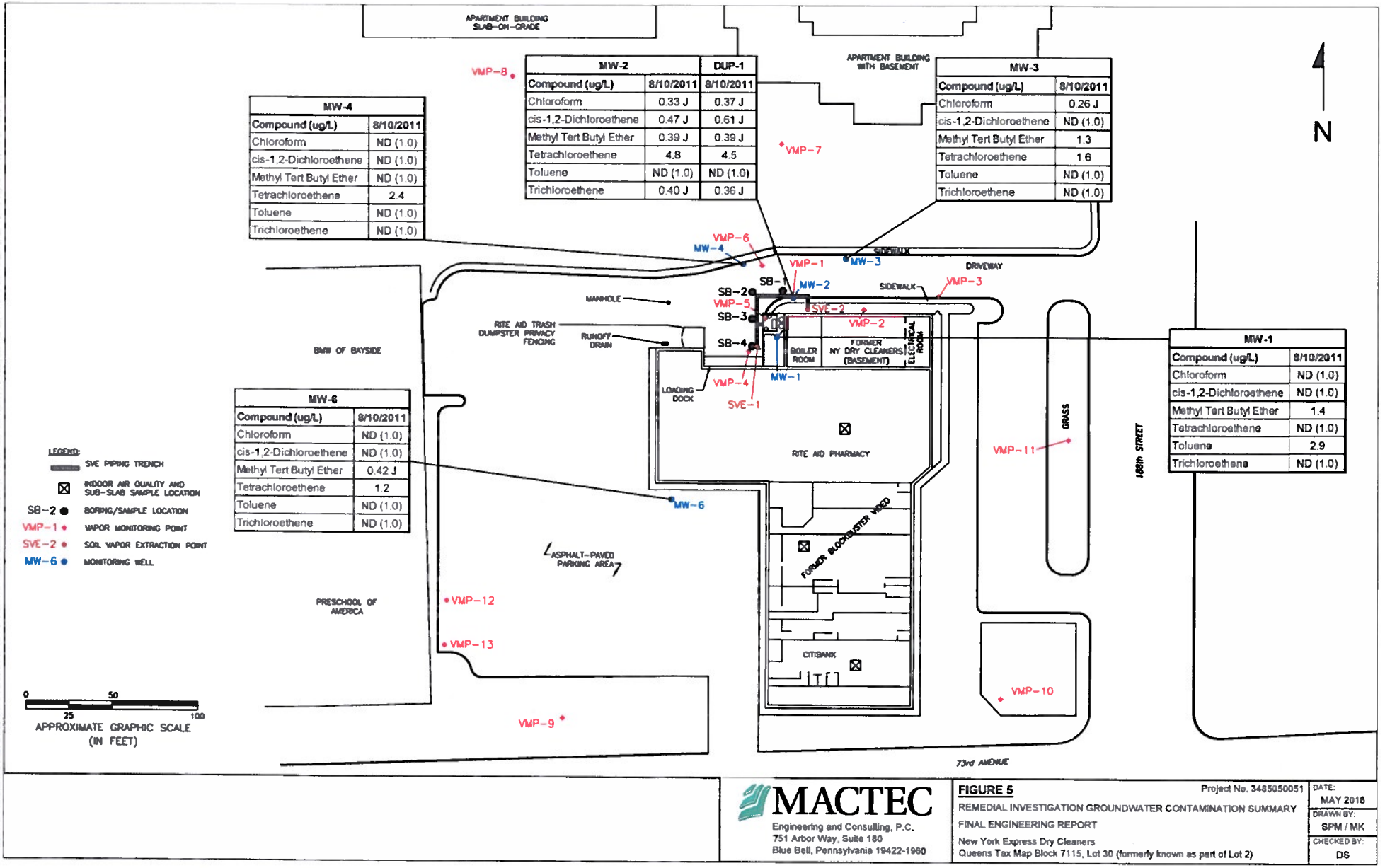
FIGURE 4
REMEDIAL INVESTIGATION SOIL VAPOR DATA
FINAL ENGINEERING REPORT
New York Express Dry Cleaners
Queens Tax Map Block 7115, Lot 30 (formerly known as part of Lot 2)

Project No. 3485050051

DATE: MAY 2016
DRAWN BY: SPM / MK
CHECKED BY: DS



MW-2		DUP-1
Compound (ug/L)	8/10/2011	8/10/2011
Chloroform	0.33 J	0.37 J
cis-1,2-Dichloroethene	0.47 J	0.61 J
Methyl Tert Butyl Ether	0.39 J	0.39 J
Tetrachloroethene	4.8	4.5
Toluene	ND (1.0)	ND (1.0)
Trichloroethene	0.40 J	0.36 J

MW-3	
Compound (ug/L)	8/10/2011
Chloroform	0.26 J
cis-1,2-Dichloroethene	ND (1.0)
Methyl Tert Butyl Ether	1.3
Tetrachloroethene	1.6
Toluene	ND (1.0)
Trichloroethene	ND (1.0)

MW-4	
Compound (ug/L)	8/10/2011
Chloroform	ND (1.0)
cis-1,2-Dichloroethene	ND (1.0)
Methyl Tert Butyl Ether	ND (1.0)
Tetrachloroethene	2.4
Toluene	ND (1.0)
Trichloroethene	ND (1.0)

MW-1	
Compound (ug/L)	8/10/2011
Chloroform	ND (1.0)
cis-1,2-Dichloroethene	ND (1.0)
Methyl Tert Butyl Ether	1.4
Tetrachloroethene	ND (1.0)
Toluene	2.9
Trichloroethene	ND (1.0)

MW-6	
Compound (ug/L)	8/10/2011
Chloroform	ND (1.0)
cis-1,2-Dichloroethene	ND (1.0)
Methyl Tert Butyl Ether	0.42 J
Tetrachloroethene	1.2
Toluene	ND (1.0)
Trichloroethene	ND (1.0)

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FIGURE 5 Project No. 3485050051

REMEDIAL INVESTIGATION GROUNDWATER CONTAMINATION SUMMARY

FINAL ENGINEERING REPORT

New York Express Dry Cleaners
Queens Tax Map Block 7115, Lot 30 (formerly known as part of Lot 2)

DATE: MAY 2016
DRAWN BY: SPM / MK
CHECKED BY: DS

APPENDIX A

ENVIRONMENTAL EASEMENT AND METES AND BOUNDS

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

THIS INDENTURE made this 15th day of June, 2015 between Owner(s) Street Retail, Inc., having an office at 1626 East Jefferson Street, Rockville, Maryland, County of Montgomery, State of Maryland (the "Grantor"), and The People of the State of New York (the "Grantee."), acting through their Commissioner of the Department of Environmental Conservation (the "Commissioner", or "NYSDEC" or "Department" as the context requires) with its headquarters located at 625 Broadway, Albany, New York 12233,

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

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

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

WHEREAS, Grantor, is the owner of real property located, and having a legal address known as 69-62 188th Street (address where the easement is located has a business address of 69-60 188th Street) in the City of New York, County of Queens and State of New York, known and designated on the tax map of the New York City Department of Finance as tax map parcel number: Block 7115 Part of Lot 30, being the same as that property conveyed to Grantor by deed dated December 4, 1997 and recorded in the County Clerk's Office in Reel 4753, Page 996. The property subject to this Environmental Easement (the "Controlled Property") comprises approximately 0.02952 +/- acres, and is hereinafter more fully described in the Land Title Survey dated May 14, 2013 and revised November 6, 2014 prepared by Roguski Land Surveying, P.C., which will be attached to the Site Management Plan. The Controlled Property description is set forth in and attached hereto as Schedule A; and

WHEREAS, the Department accepts this Environmental Easement in order to ensure the protection of public health and the environment and to achieve the requirements for remediation

established for the Controlled Property until such time as this Environmental Easement is extinguished pursuant to ECL Article 71, Title 36; and

NOW THEREFORE, in consideration of the mutual covenants contained herein and the terms and conditions of Brownfield Cleanup Agreement Index Number: W2-1010-04-06, Grantor conveys to Grantee a permanent Environmental Easement pursuant to ECL Article 71, Title 36 in, on, over, under, and upon the Controlled Property as more fully described herein ("Environmental Easement")

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

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

A. (1) The Controlled Property may be used for:

Residential as described in 6 NYCRR Part 375-1.8(g)(2)(i), Restricted Residential as described in 6 NYCRR Part 375-1.8(g)(2)(ii), Commercial as described in 6 NYCRR Part 375-1.8(g)(2)(iii) and Industrial as described in 6 NYCRR Part 375-1.8(g)(2)(iv)

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

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

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

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

(6) Data and information pertinent to Site Management of the Controlled

Property must be reported at the frequency and in a manner defined in the SMP;

(7) All future activities on the property that will disturb remaining contaminated material must be conducted in accordance with the SMP;

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

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

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

B. The Controlled Property shall not be used for raising livestock or producing animal products for human consumption, and the above-stated engineering controls may not be discontinued without an amendment or extinguishment of this Environmental Easement.

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

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

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

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

This property is subject to an Environmental Easement held by the New York State Department of Environmental Conservation pursuant to

Title 36 of Article 71 of the Environmental Conservation Law.

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

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

(1) the inspection of the site to confirm the effectiveness of the institutional and engineering controls required by the remedial program was performed under the direction of the individual set forth at 6 NYCRR Part 375-1.8(h)(3).

(2) the institutional controls and/or engineering controls employed at such site:

(i) are in-place;

(ii) are unchanged from the previous certification, or that any identified changes to the controls employed were approved b the NYSDEC and that all controls are in the Department-approved format; and

(iii) that nothing has occurred that would impair the ability of such control to protect the public health and environment;

(3) the owner will continue to allow access to such real property to evaluate the continued maintenance of such controls, said access to include any exterior portion of the deeded property reasonably necessary to permit direct access to the Controlled Property referenced herein;

(4) nothing has occurred that would constitute a violation or failure to comply with any site management plan for such controls;

(5) the report and all attachments were prepared under the direction of, and reviewed by, the party making the certification;

(6) to the best of his/her knowledge and belief, the work and conclusions described in this certification are in accordance with the requirements of the site remedial program, and generally accepted engineering practices; and

(7) the information presented is accurate and complete.

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

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

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

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

5. Enforcement

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

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

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

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

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

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

Parties shall address correspondence to:

Site Number: C241050
Office of General Counsel
NYSDEC
625 Broadway
Albany New York 12233-5500

With a copy to:

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

All notices and correspondence shall be delivered by hand, by registered mail or by Certified mail

and return receipt requested. The Parties may provide for other means of receiving and communicating notices and responses to requests for approval.

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

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

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

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

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

Street Retail, Inc.:

By: _____

Print Name: Dawn M. Becker

Title: VP-Chief Operating Officer Date: 6/5/2015

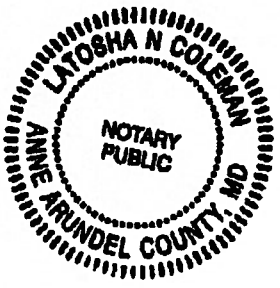
Grantor's Acknowledgment

STATE OF Maryland)
) ss:
COUNTY OF Montgomery)

On the 5th day of June, in the year 2015, before me, the undersigned, personally appeared Dawn M. Becker, personally known to me or proved to me on the basis of satisfactory evidence to be the individual(s) whose name is (are) subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their capacity(ies), and that by his/her/their signature(s) on the instrument, the individual(s), or the person upon behalf of which the individual(s) acted, executed the instrument.

LaTosha Coleman
Notary Public - State of

LATOSHA N COLEMAN
NOTARY PUBLIC STATE OF MARYLAND
COUNTY OF ANNE ARUNDEL
My Commission Expires April 28, 2018



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

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

Grantee's Acknowledgment

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

On the 15th day of June, in the year 2015, before me, the undersigned, personally appeared Robert W. Schick, personally known to me or proved to me on the basis of satisfactory evidence to be the individual(s) whose name is (are) subscribed to the within instrument and acknowledged to me that he/she/ executed the same in his/her/ capacity as Designee of the Commissioner of the State of New York Department of Environmental Conservation, and that by his/her/ signature on the instrument, the individual, or the person upon behalf of which the individual acted, executed the instrument.

_____
Notary Public - State of New York

David J. Chiusano
Notary Public, State of New York
No. 01CH5032146
Qualified in Schenectady County
Commission Expires August 22, 2016

SCHEDULE "A" PROPERTY DESCRIPTION

Easement Description

All that certain plot, piece or parcel of land situate lying and being in the County of Queens, City and State of New York, bounded and described as follows:

BEGINNING at a point following two (2) courses and distances:

1) along westerly side of 188th Street distant 227.65 feet northerly from the corner formed by the intersection of the westerly side of 188th Street with the northerly side of 73rd Avenue;
2) westerly along part of building wall line 164.12 feet;

RUNNING THENCE westerly along building wall line 12.00 feet;

THENCE southerly along building wall line forming an exterior angle of 89 degrees 57 minutes 48 seconds with the last mentioned course, 31.28 feet;

THENCE westerly along building wall line forming an interior angle of 90 degrees 17 minutes 16 seconds with the last mentioned course, 12.15 feet;

THENCE northerly along a line forming an interior angle of 89 degrees 40 minutes 32 seconds with the last mentioned course, 5.82 feet;

THENCE westerly at right angles to the last mentioned course, 16.42 feet;

THENCE northerly at right angles to the last mentioned course, 37.53 feet;

THENCE easterly at right angles to the last mentioned course, 40.55 feet;

THENCE southerly at right angles to the last mentioned course, 12.00 feet to the point or place of BEGINNING.

Easement area is 1286.0 sq. ft. = 0.02952 acres
Premises commonly known as 69-62 188th Street
Section 32 Block 7115 Part of Lot 30

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RECORDING AND ENDORSEMENT COVER PAGE PAGE 1 OF 10

Document ID: 2016031600800001 Document Date: 06-15-2015 Preparation Date: 03-16-2016
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PROPERTY DATA

Borough	Block	Lot	Unit	Address
QUEENS	7115	30	Entire Lot	69-62 188TH STREET

Property Type: COMMERCIAL REAL ESTATE Easement

CROSS REFERENCE DATA

CRFN_____ *or* DocumentID_____ *or* _____ Year_____ Reel____ Page_____ *or* File Number_____

PARTIES

GRANTOR/SELLER:	GRANTEE/BUYER:
STREET RETAIL, INC. 1626 EAST JEFFERSON STREET ROCKVILLE, MD 20852	THE PEOPLE OF THE STATE OF NEW YORK 625 BROADWAY ALBANY, NY 12233

FEES AND TAXES

Mortgage :		
Mortgage Amount:	$	0.00
Taxable Mortgage Amount:	$	0.00
Exemption:		
TAXES: County (Basic):	$	0.00
City (Additional):	$	0.00
Spec (Additional):	$	0.00
TASF:	$	0.00
MTA:	$	0.00
NYCTA:	$	0.00
Additional MRT:	$	0.00
TOTAL:	$	0.00
Recording Fee:	$	82.00
Affidavit Fee:	$	0.00

Filing Fee:	
$	0.00
NYC Real Property Transfer Tax:	
$	0.00
NYS Real Estate Transfer Tax:	
$	0.00

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DOCUMENT ID:	2016031600800001	CRFN:	2016000127317	COLLATERAL:	N/A
# of PAGES:	10	REEL-PAGE:	N/A-N/A	EXPIRATION DATE:	N/A
DOC. TYPE:	EASEMENT	FILE NUMBER:	N/A	ASSESSMENT DATE:	N/A
DOC. DATE:	6/15/2015	RECORDED / FILED:	4/12/2016 12:24:30 PM	SLID #:	N/A
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MESSAGE:	N/A				

PARTY 1

NAME	ADDRESS 1	ADDRESS 2	CITY	STATE	ZIP	COUNTRY
STREET RETAIL, INC	1626 EAST JEFFERSON STREET		ROCKVILLE	MD	20852	US

PARTY 2

NAME	ADDRESS 1	ADDRESS 2	CITY	STATE	ZIP	COUNTRY
THE PEOPLE OF THE STATE OF NEW YORK	625 BROADWAY		ALBANY	NY	12233	US

PARTY 3/Other

NAME	ADDRESS 1	ADDRESS 2	CITY	STATE	ZIP	COUNTRY

PARCELS

BOROUGH	BLOCK	LOT	PARTIAL	PROPERTY TYPE	EASEMENT	AIR RIGHTS	SUBTERRANEAN RIGHTS	PROPERTY ADDRESS	UNIT	REMARKS
QUEENS	7115	30	ENTIRE LOT	COMMERCIAL REAL ESTATE	Y	N	N	69-62 188TH STREET		

REFERENCES

CRFN	DOCUMENT ID	BOROUGH	YEAR	REEL	PAGE	FILE NBR

REMARKS

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APPENDIX B

ELECTRONIC COPY OF THE FINAL ENGINEERING REPORT

APPENDIX C

SAMPLE HEALTH AND SAFETY PLAN

INSTRUCTIONS FOR COMPLETING THE HEALTH AND SAFETY PLAN TEMPLATE

1. Instructions for completing a section or sections that need modification are highlighted in yellow. Instructions be deleted in the final draft.

2. Complete the cover page with the site name, city, state, company name, project number, and date of completion.

3. Page i – Fill in all blanks (with the exception of amendments) and have appropriate personnel who approved the document sign on the blanks provided. If non-standard site conditions are present then the Division EH&S Manager must approve the Health and Safety Plan.

4. Page ii – Have all personnel sign the Health and Safety Plan on their first day in the field. This acknowledges that personnel present have read the Plan.

5. Page 1 – Write a Site Description Section that includes the information listed on Page 1. List the tasks to be conducted at the site and check the box to indicate which tasks involve MACTEC Employees. All tasks to be completed by MACTEC workers will need to have JHAs developed and included in Appendix B. Note: to put an "x" in the box, double click on the box and under "Default Value" click on "Checked"

6. Page 2 – Insert the site map here.

7. Page 4 – Place Xs in the appropriate blanks for your project within Sections 5.2 and 5.3.

8. Page 5 – Fill in or have personnel fill in Table 3.1 with all of their certifications and the dates of which their certifications were received.

9. Pages 6 -7 – Place Xs in the appropriate blanks for your project within Section 5.3 and follow the bold directions in Section 6.0. In addition, list the contaminants of concern for the site.

10. Page 7 – List all JHAs that are applicable to the work to be conducted by MACTEC employees. The most common JHAs are already listed. Delete those not applicable and add others not currently on the list.

11. Page 8 – Individual action limits have been established the standard contaminants at the site. This assumes that chlorinated solvents (TCE, PCE, vinyl chloride), BTEX, and nuisance dusts are contaminants of concern. Contact the Division ES&S manager if you need help developing action levels for your site.

12. Pages 8 - 10 – Re-write the written monitoring instructions and summarize the air monitoring action levels in Table 7-1. This assumes that chlorinated solvents (TCE, PCE, vinyl chloride), BTEX, and nuisance dusts are contaminants of concern. Contact the Division ES&H Manager if you need help.

13. Page 11 – Complete Table 8-1 which summarizes all the PPE to be used at the site. This can be competed by reviewing the individual JHAs for the tasks that MACTEC is to perform and including required PPE here. See the PPE selection guide below for additional information.

14. Page 12 – Double click on the appropriate boxes and change to "Checked" for section 10.3.

15. Page 13 – Prepare a map of the Route from your site to the hospital and name it Figure 10.1.

16. Page 14 – Add Names and Telephone Numbers for all personnel appropriate for your site that are listed on Table 1.1.

17. Page 15 – Double click on the appropriate boxes and change to "Checked" for section 10.4.

18. Page 17 – Double click on the appropriate boxes and change to "Checked" for sections 11..0 and 12.0. If "Yes" is checked in section 12.0, include spill containment procedures in Appendix J. In Section 13.0, ensure that the list of chemicals brought to the site is correct. If the list of chemicals is not correct then delete/add as appropriate.

19. Appendix A – Include Contaminant Fact Sheets for the contaminant of concern at your site. If you need help in developing any missing Contaminant Fact Sheets, contact the Division ES&H Manager.

20. Appendix B – Include all JHAs applicable for the tasks to be performed by MACTEC employees. Some standard JHAs have been included. Modify if needed.

21. Appendix C – Assure that the decontamination procedures outlined in Tables C1, C2 and C3 are correct for your project.

22. Appendix E – Collect the appropriate Material Safety Data Sheets for your project.

23. Appendix I – Include Spill Containment procedures if the box in section 12.0 was checked "Yes."

24. **READ ALL SECTIONS OF THE DOCUMENT TO ASSURE THAT THE HEALTH AND SAFETY PLAN DOES NOT STATE THAT YOU WILL PERFORM AN ACTION THAT YOU ARE NOT PLANNING TO PERFORM AT YOUR SITE.**

PPE Selection Guide

The following are guidelines to help you in the selection of PPE for the site. When selecting the appropriate PPE for the job, consider the following:

- **Safety glasses** – general eye protection – source of hazard, typically coming from straight on , required at most sites
- **Tinted Safety Glasses** – same as above, but when working in direct sunlight. May need two both tinted and untinted if working in both sunlight and shade.
- **Safety goggles** – needed for splash hazard, more severe eye exposures coming from all directions. Non-vented or indirect venting for chemical splash, non-vented for hazardous gases or very fine dust, vented for larger particulates coming from all directions.
- **Face shield** – needed to protect face from cuts, burns, chemicals (corrosives or chemicals with skin notation), etc.
- **Safety boots** – needed if danger of items being dropped on foot that could injure foot
- **Hard hat** – danger from items falling on head – any overhead work, tools, equipment, etc that is above the head and could fall on head of item fails, or falls off work platform. Typically required at most sites as a general PPE
- **Thin, chemical protective inner gloves** (e.g., thin Nitrile, PVC – do not use latex – many people are allergic to latex) –needed to protect hands from incidental contact with low risk contamination

at very low concentrations (ppb or low ppm concentrations in groundwater or soil) or used in combination with outergloves as a last defense against contamination. Need to specify type

- **Outergloves** – thicker gloves (e.g., Nitrile, Butyl, Viton, etc.) – used when potential for high concentrations of contaminants (e.g., floating product, percent ranges of contaminant, opening drums, handling pure undiluted chemicals, etc.). Need to specify type.
- **Leather gloves, leather palm, cotton** – good in protecting hands against cuts – no protection from chemicals. May be used in combination with chemical protective gloves.
- **Boot Covers** – when there is contamination in surface soils or waking surface in general. When safety boots need protection from contact with contaminants.
- **White (uncoated) Tyveks** – protect clothing from getting dirty, good for protection against solid, non-volatile chemicals (e.g., asbestos, metals) – no chemical protection.
- **Polycoated Tyveks** – least protective of chemical protective clothing. Used when some risk of contamination getting on skin or clothing. Usually, lower ppm ranges of contaminants.
- **Saranex** – Greater protection against contamination than Polycoated Tyveks. Used to protect against PCBs or higher concentrations of contaminants in the soil or groundwater.
- **Other Chemical protective clothing** – if significant risk of dermal exposure, contact H&S to determine best kind.
- **Long sleeved shirts, long pants** – if working in areas with poison ivy/oak/sumac, poisonous insects, etc. and no chemicals exposure. May want to use uncoated Tyveks for work in areas where poisonous plants are know to be to protect clothing.
- **Cartridge Respirator (Level C PPE)** – Need to calculate change schedule (contact Division EH&S Manager for this) to determine length of use. To be able to use cartridge respirators, need to know contaminants, estimate levels to be encountered in the breathing zone, need to ensure that cartridge will be effective against COCs, and need to be able to monitor for COCs using PID, FID, Dräger tubes, etc.. If can't do any of these, then Level B PPE is probably going to be needed.
- **SCBA or Airline Respirator (Level B PPE)** – Needed for high concentrations of contaminants, for when COCs are unknown, when Cartridge respirators can't be used or are unfeasible.
- **High Visibility Vest** – needed for any road work (with in 15 feet of a road) or when working on a site with vehicular traffic. Needed if work tasks would take employee concentration away from movement of vehicles and workers would have to rely on the other driver's ability to see the employee in order not to hit them. This includes heavy equipment as well as cars and trucks, on public roads or the jobsite.
- **Reflective Vest** – see above, but for use at night.
- **Fall Protection Harness and lifeline** – need type with two "D" rings in back to take double lanyards. Needed if working at heights over 6 feet if no guard rails are required, if working on an aerial lift, etc.
- **Hearing Protection** – needed if working at noise levels above 85 dBA on a time weighted average. If noise measurements are not available, use around noisy equipment, or in general, if you have to raise your voice to be heard when talking to someone standing two feet away.
- **Protective Chaps** – required when using a machete or chain saw or any other cut hazard with legs.

SITE-SPECIFIC HEALTH & SAFETY PLAN

NEW YORK EXPRESS DRY CLEANERS
73rd AVENUE SHOPPING CENTER
FRESH MEADOWS, NEW YORK

3485050051

Prepared by:

MACTEC, Inc.
1787 Sentry Parkway West, Suite 120
Blue Bell, PA 19422

March 2011

SITE-SPECIFIC HEALTH & SAFETY PLAN (HASP)

Project Name: 73rd Avenue Shopping Center
Project Location: Fresh Meadows, New York
Project No.: 3485050051 Task No: _____

This HASP, which must be kept on site, addresses the health and safety hazards of each task conducted by MACTEC employees for this project, including the requirements and procedures for worker protection (per 29 CFR 1910.120 and the MACTEC ES&H Program 2.9.A - Hazardous Waste Operations and Emergency Response (HAZWOPER) Program). The HASP was developed based on the hazards know or suspected to be present at the site, specifically as they relate to the work to be conducted by MACTEC employees. The hazards and controls within this HASP do not necessarily address all the hazards associated with subcontractor personnel. Subcontractors may adopt this HASP; however they will be responsible for reviewing and revising/amending the HASP to ensure that it addresses hazards unique to their operations.

The Site Health and Safety Officer (SHSO) can change or amend this document only with agreement from the Division Environmental Health and Safety Manager (DEHSM). The SHSO must initial any change made to the HASP at the relevant section and document the amendment date below.

Prepared by: Victoria Bisbing MACTEC Managing Office: Plymouth Meeting

Approved by:

Dave Side	
SHSO	Date
Jesse Garvey	
Field Lead	Date
Dave Side	
Project Manager	Date

Date(s) of Amendment(s): _____

All site workers shall read this HASP. A pre-entry briefing conducted by the SHSO shall be held prior to initiating this project. Items to be covered during the briefing can be found on the Site Safety Orientation form (Appendix F). All applicable sections of this HASP shall be reviewed during this briefing. The SHSO shall review the information covered in the pre-entry briefing meeting with any worker not in attendance at the initial meeting prior to commencing work. Brief meetings will be held at the beginning of each work day to discuss important safety and health issues concerning tasks performed on that day and documented on the Daily Safety Meeting checklist (Appendix G). After reading the HASP and attending a pre-entry briefing, workers shall sign the following acknowledgment statement:

MACTEC Field Team Review: I acknowledge that I have read the requirements of this HASP, and agree to abide by the procedures and limitations specified herein. I also acknowledge that I have been given an opportunity to have my questions regarding the HASP and its requirements answered prior to performing field activities. Health and safety training and medical surveillance requirements applicable to my field activities at this site are current and will not expire during on-site activities.

NAME	DATE	NAME	DATE

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Appendix

1.0 SITE DESCRIPTION

The 73rd Avenue Shopping Center is a small shopping center located on 73rd Avenue and 188th Street in Fresh Meadows, New York. The shopping center is currently comprised of a Chinese food store, a nail salon, a branch of CitiBank, a Blockbuster Video store, a Rite Aid Pharmacy store, and the former New York Express Dry Cleaners (New York Express), which had operated retail dry cleaning on their premises. New York Express was located at the north end of the shopping center and is adjacent to the Rite Aid Pharmacy.

The present configuration of Long Island is primarily the result of the last ice age, the Wisconsin, which ended about ten thousand years ago. Two advances of the Wisconsin ice sheet during the Upper Pleistocene of the Quaternary Period caused the island to be blanketed with till, ice contact stratified drift, and outwash deposits. The terminal moraines and the north shore are composed primarily of stratified drift, with some till. The area between the moraines and south of them are mostly the outwash deposits. The surficial geology of Central and South Long Island is of glaciofluvial origin.

Groundwater occurs and flows within the Pleistocene sediments that underlie the Site. The direction of groundwater flow is to the northwest towards the nearest bodies of surface water, and appears to mimic the local topography.

Based on a review of the USGS topographic map for the area, the elevation at the Site is approximately 70 feet above mean sea level (msl). The topography of the Site is downward sloping primarily from southeast to northwest.

Meadow and Willow Lakes are approximately two and three-quarter miles west of the Site, respectively. Kissena Lake is located a mile and one-half northwest of the Site. Shallow ground water typically flows towards the nearest stream, river, or other surface water body.

Soil sampling will be conducted adjacent to the former UST location. The highest concentrations of the VOC PCE, TCE, and cis-DCE were previously detected in soil samples collected in this area. Elevated concentrations of SVOC were also detected in soil samples collected in this area. Metals analysis, polychlorinated biphenyl (PCB) analysis and pesticide and herbicide analysis, all of which are now required under the NYSDEC Brownfields Program, were not conducted because the Site was not in the program during the performance of the previous investigations and NYSDEC did not require such analyses. Soil samples collected under this SRIWP will be submitted for the following analyses:

- VOC analysis in accordance with USEPA Method 8260
- SVOC analysis in accordance with USEPA Method 8270
- PCB analysis in accordance with USEPA Method 8082
- Metals analysis in accordance with USEPA Method 6010B/7000
- TCL Pesticides in accordance with USEPA Method 8081A
- Herbicides (full list) in accordance with SW Method 846/USEPA Method 8151A

There are currently five monitoring wells at the Site. The monitoring wells are designated MW-1 through MW-4, and MW-6. Monitoring well MW-5 was abandoned. All five of the monitoring wells will be sampled in the proposed groundwater-sampling event. A low flow purging and sampling method consistent with the USEPA Region I Low Stress Purging and Sampling Procedure for the collection of Groundwater Samples from Monitoring Wells, July 30, 1996, will be used to collect groundwater samples

at the Site. Groundwater samples will be collected for volatile organic compound (VOC) analysis in accordance with USEPA Method 8260 The groundwater sample will be collected in labeled 40-milliliter (ml) glass vials, with Teflon septum and preserved with hydrochloric acid.

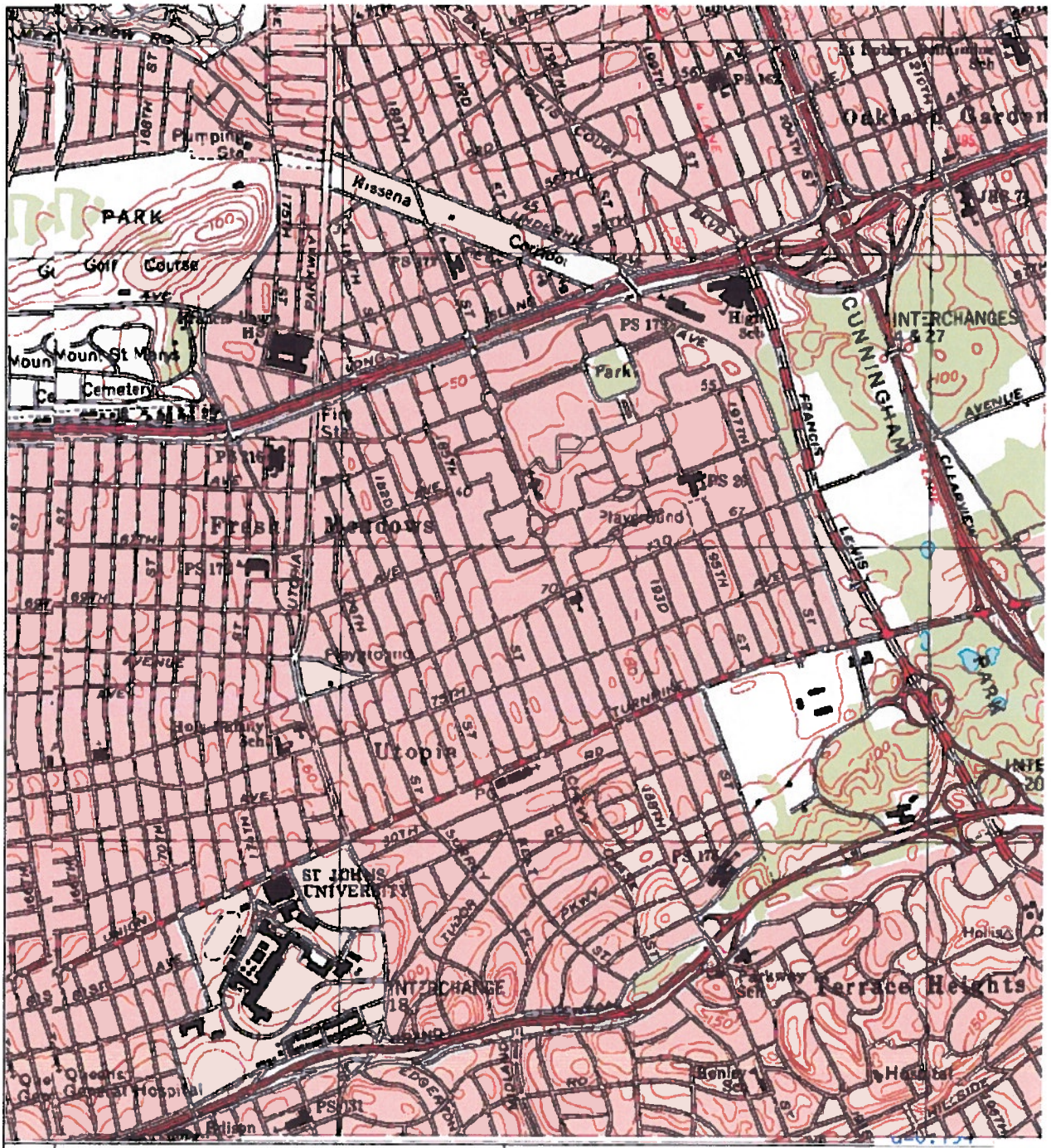
The following tasks are to be performed at the site. Check the box to show if a task it to be conducted by either MACTEC or our Subcontractor and that a JHA has been developed and included with this HASP.

MAC-TEC	Sub	Tasks	JHA Developed	Initial Level of PPE
☒	☐	▪ Groundwater Sampling	☐	
☒	☒	▪ Soil Boring and Sampling	☐	
☐	☐	▪	☐	
☐	☐	▪	☐	
☐	☐	▪	☐	
☐	☐	▪	☐	
☐	☐	▪	☐	
☐	☐	▪	☐	

Expected start date: Spring to early summer 2011.

Expected duration of project: Two to three weeks of field activities.

Expected average number of workers on site per day: Three to four workers per day.



MACTEC

1787 Sentry Parkway, Suite 120

Blue Bell, Pennsylvania 19422

Figure 1-1

SITE LOCATION MAP

73 Avenue Shopping Center

69-60 188th STREET, Fresh Meadows, NEW YORK

MACTEC E&C PROJECT NO.: 3485050051

2.0 KEY PERSONNEL AND HEALTH AND SAFETY RESPONSIBILITIES

Figure 2.1 shows the project organizational chart. Table 2.1 describes health and safety responsibilities for key project personnel.

Figure 2.1 - Project Organization Chart

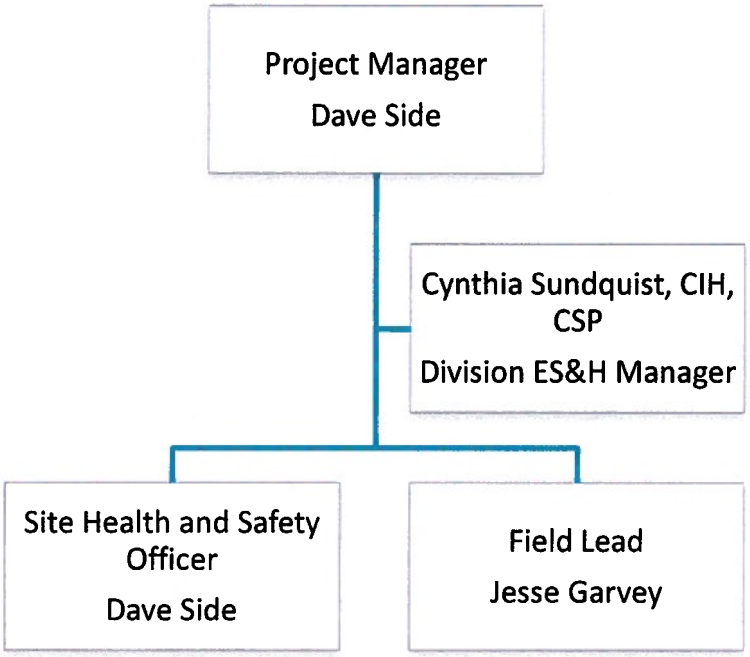


TABLE 2.1

KEY PERSONNEL HEALTH AND SAFETY RESPONSIBILITIES

DIVISION ENVIRONMENTAL HEALTH AND SAFETY MANAGER **Cindy Sundquist, CIH, CSP**	**FIELD LEAD (FL)** **Name: Jesse Garvey**	**SITE HEALTH & SAFETY OFFICER (SHSO)** **Name: Dave Side**	**PROJECT PERSONNEL** **Name: Victoria Bisbing**
▪ Implement appropriate corporate health and safety policies, or environmental projects ▪ Approve HASP and Amendments ▪ Maintain exposure monitoring records ▪ Notify Corporate ES&H Manager in the event of an emergency situation ▪ Verify that corrective actions recommended on Incident Analysis Forms have been implemented	▪ See that personnel receive this plan, are aware of its provisions, and are aware of the potential hazards associated with site operations, are instructed in safe work practices, and are familiar with emergency procedures, and these actions are documented ▪ Determine that appropriate monitoring and personnel protective equipment are available ▪ Monitor the Field Logbooks to ensure the health and safety work practices are employed ▪ Coordinate with SHSO so that emergency response procedures are implemented ▪ Ensure corrective actions recommended on Incident Analysis Forms are implemented	▪ Implement project HASP; report to the Project Manager for action if any deviations from the anticipated conditions exist; and authorize the cessation of work at site investigations if necessary ▪ Confirm that prior to a hazardous waste site visit, site personnel meet the proper medical requirements and have the health and safety training to qualify them to perform their assigned tasks. Identify all site personnel with special medical conditions. ▪ Conduct pre-entry briefing and tailgate safety meetings. Document meetings on Daily Tailgate Safety Meeting Checklist (See Appendix G) ▪ Verify that all monitoring equipment and personal protective equipment is operating correctly according to manufacturer's instructions and such equipment is utilized by on-site personnel. Calibrate or verify calibration of all monitoring equipment and record results. ▪ Conduct weekly inspections of jobsite using the Weekly Site Safety And Health Checklist (See Appendix H) ▪ Implement site emergency and follow-up procedures	▪ Be familiar with and abide by the HASP ▪ Notify the SHSO of any special medical conditions (e.g., allergies) ▪ Immediately report any accidents and/or unsafe conditions to the SHSO ▪ No individual shall go on site where he/she does not have the required safety training

3.0 WORKER TRAINING

Upon designation of a specific project team, Table 3.1 will be completed to summarize the training experience of the project team with respect to 29 Code of Federal Regulations (CFR) 1910.120(e), 29 CFR 1910.38, and 29 CFR 1910.1200 and MACTEC ES&H Programs and Procedures: Environment, Safety and Health (ESH) 2.9.A – Hazardous Waste Operations and Emergency Response Program and ESH 2.9.E – Hazard Communication Program..

4.0 MEDICAL SURVEILLANCE

Upon designation of a specific project team, Table 3.1 will be completed to indicate the workers who participate in the company's Medical Surveillance Program (MACTEC ESH 2.13.1, 29 CFR 1910.120(f)). All workers who could potentially be exposed to concentrations of contaminants above the Occupational Safety and Health Administration (OSHA) Permissible Exposure Limits (PELs) for 30 days per year or more must be included in the Medical Surveillance Program. Any site specific medical surveillance conducted for site workers will also be listed on the table.

TABLE 3.1

TRAINING/MEDICAL SURVEILLANCE/RESPIRATORY PROTECTION RECORDS

(Add any other training required for the site)

Role:	Required?	Names of Field Team Members					
		Field Operations Lead: Jesse Garvey	Site Health and Safety Officer: Dave Side	Other Field Personnel Victoria Bisbing			
Training/Medical		Dates	Dates	Dates	Dates	Dates	Dates
Medical Surveillance		June 22, 2010	December 2010	October 2010			
Site Specific Medical Testing:_____							
40-Hour Initial	X	November 2005	April 1985	June 2008			
8-Hour Supervisor [1]							
8-Hour Refresher	X	6/21/2010	6/21/2010	October 2009			
First Aid/CPR [1, 2]		6/21/2010	6/21/2010				
Respirator Fit Test [1]							
Respirator Brand [1]							
Hazard Communication							
Confined Space Entry [1]							
Fall Protection [1]							
Ladder Safety[1]							
Biological Hazards[1]							
Excavation Safety[1]							
Client Required [1]							

[1] If Applicable
[2] At least one worker must be trained in First Aid/CPR and have received Bloodborne Pathogen training.
[3] Required if acting as LF or SSHO

5.0 SITE CONTROL

Site control procedures, as required by 29 CFR 1910.120(d) and MACTEC ESH 2.9.A - Hazardous Waste Operations and Emergency Response Program, will be implemented before the start of site tasks to control worker exposures to contaminants.

5.1 WORK ZONES

Work zones are to be determined at the site by the SHSO. At this time it is anticipated that the work zones will be defined relative to the location of the work activity. The Exclusion Zone is considered the area within a 10-foot diameter of the sampling location. The Contamination Reduction Zone is considered to be the area within a 20-foot diameter of the sampling location. The decontamination zone will be located upwind of the work area. Work zones will be maintained through the use of:

☐ Warning Tape

☒ Cones and/or Barricades

☒ Visual Observations

5.2 BUDDY SYSTEM

When required by contract or when conditions exist that could be dangerous to life and health, a buddy system shall be implemented.

Yes	No	
☐	☒	Buddy System required?

5.3 SITE ACCESS

Access to the site will be controlled using the following method(s):

☐ Sign in/sign out log ☐ Guard

☐ Identification badges ☒ Other: Predetermined meeting area.

5.4 GENERAL SAFE WORK PRACTICES

General safe work practices to be implemented during work activities at this site are included in Table 5.1.

TABLE 5.1

GENERAL SAFE WORK PRACTICES

- Minimize contact with excavated or contaminated materials. Plan work areas, decontamination areas, and procedures accordingly. Do not place equipment or drums on the ground. Do not sit on drums or other materials. Do not sit or kneel on the ground in the Exclusion Zone or CRZ. Avoid standing in or walking through puddles or stained soil.
- Smoking, eating, or drinking after entering the work zone and before decontamination will not be allowed. Use of illegal drugs and alcohol are prohibited.
- Practice good housekeeping. Keep everything orderly and out of potentially harmful situations.
- In an unknown situation, always assume the worst conditions.
- Be observant of your immediate surroundings and the surroundings of others. It is a team effort to notice and warn of impending dangerous situations. Withdrawal from a hazardous situation to reassess procedures is the preferred course of action.
- Conflicting situations may arise concerning safety requirements and working conditions and must be addressed and resolved rapidly by the SHSO, Field Lead and Project Manager to relieve any motivations or pressures to circumvent established safety policies.
- Unauthorized breaches of specified safety protocol will not be allowed. Workers unwilling or unable to comply with the established procedures will be discharged.

6.0 HAZARD ANALYSIS

6.1 CONTAMINANTS OF CONCERN

Pertinent site information (e.g. records of chemicals used, records of disposal) and previous sampling data (e.g. groundwater, soil, sediment) have been reviewed to determine the contaminants of concern for this project. The known or suspected contaminants for the site are:

Contaminants of Concern (Attach Fact Sheets)	Maximum Concentrations		PEL/TLV
	Soil (mg/kg)	Water/Groundwater (µg/l)	
Trichloroethene	4.7	64	100/50 ppm
Tetrachloroethene	49	24	100/25 ppm
Cis-1,2-Dichloroethene	NA	68	300/200 ppm

Appendix A contains Contaminant Fact Sheets for each of these contaminants of concern. **ENSURE THAT YOU HAVE CORRECT CONTAMINANT FACT SHEETS – See Portland P: drive under NDIV H&S.**

Health hazards shall be evaluated using air monitoring equipment (Section 7.0) and controlled by implementing personal protective equipment (Section 8.0).

6.2 JOB HAZARD ANALYSIS

Job Hazard Analyses (JHA) have been conducted for each task associated with this project in compliance with the MACTEC ESH 2.9.1 – Risk Assessment and Job Hazard Analysis Procedure. The following JHAs can be found in Appendix B.

JHAs: Check and attach all that apply (add applicable JHAs not already listed) delete those not applicable

Activity Specific JHAs:

☒	Mobilization/Demobilization and Site Preparation
☒	Field Work - General
☐	Field Work - Oversight
☒	Decontamination
☒	Groundwater Sampling
☒	Soil Sampling
☐	Drilling Operation (MACTEC Driller)
☐	Geoprobe (MACTEC Geoprobe Operator)
☐	Excavations and Backfilling
☐	Stream/Wetlands Work
☐	
☐	

Hazard Specific JHAs:

☒	Insect Stings and Bites
☒	Gasoline
☒	Working with Preservatives (Acids)
☐	
☐	
☐	
☐	
☐	
☐	
☐	
☐	
☐	

7.0 AIR MONITORING

NOTE: This section is written for petroleum products, chlorinated solvents (TCE, PCE), benzene, vinyl chloride and nuisance dust as the contaminant of concern (COC). If these are not the COCs for your site, then revise. Contact C. Sundquist for help. Section 6.1 lists the known and suspected contaminant of concern at the site. Table 7-1 table lists the monitoring instruments and upgrade/action limits that will be used at the site:

Table 7-1
Action Levels per Monitoring Instrument

			Upgrade/Action Levels			
	Meter		**Level D**	**Level C**	**Level B**	**Action**
☒	Photoionization Detector [1]					
	☐	10.0-10.6 eV	< 4 ppm	≥ 4 ppm	≥ 75 ppm	
	☒	11.0-11.7 eV		≥	≥	
☐	Flame Ionization Detector [1]			≥	≥	
☒	Detector Tubes [1]					
	☒	Benzene	< 0.5 ppm	≥ 0.5 ppm	≥ 5 ppm	
	☒	Vinyl Chloride	< 0.5 ppm	< 0.5 ppm	> 0.5 ppm	
☒	Dust Meter [1]					
	☒	Respirable	< 1.5 mg/m^3	≥ 1.5 mg/m^3	≥ 15 mg/m^3	
	☐	Total	< 5 mg/m^3	≥ 5 mg/m^3	≥ 50 mg/m^3	
☒	LEL/O_2 Meter					
	☐	LEL [2]				> 10% back off
	☐	Oxygen [1]	19.5% - 23.5%	19.5% - 23.5%	< 19.5% or > 23.5%	
☐	Hydrogen Sulfide Meter [1]		< 5 ppm	< 5 ppm	≥ 5 ppm	
☐	Carbon Monoxide [1]		< 12 ppm	< 12 ppm	≥ 12 ppm	
☐						

[1] Monitor breathing zone
[2] Monitor source (e.g., well, cuttings, borehole, etc.)

Periodic monitoring shall be conducted when the possibility of an Immediately Dangerous to Life and Health (IDLH) condition or flammable atmosphere has developed or when there is indication that exposures may have risen over permissible exposure limits or published exposure levels since prior monitoring. Situations where it shall be considered whether the possibility that exposures have risen are as follows:

- When work begins on a different portion of the site.
- When contaminants other than those previously identified are being handled.
- When a different type of operation is initiated (e.g., drum opening as opposed to exploratory well drilling.)
- When employees are handling leaking drums or containers or working in areas with obvious liquid contamination (e.g., a spill or lagoon.)

Each borehole, drill cuttings, well, etc., will be screened using the Photoionization Detector (PID) to give an indication of the potential for the presence of organic vapors. Detector tubes (DTs) for benzene and vinyl chloride and the PID will be used in the breathing zone upon the detection of PID readings above background levels in the immediate vicinity of the borehole, drill cuttings, well, etc. Action guides regarding the screening of the breathing zone and the required PPE are presented in the Table 7-2

If sustained PID readings exceed 5 ppm or benzene readings (as measured by detector tubes) exceed 4 ppm or vinyl chloride readings (as measured by detector tubes) exceed 0.5 ppm, work will be stopped, the area evacuated, and the SSHO notified. If work is stopped due to elevated levels of benzene or organic vapors, then consideration will be given to proceedings with the work using Level B PPE.

All monitoring equipment will be calibrated before each day of use. Results will be documented in the Field Logbook.

Areas of airborne dust and odor should be avoided. Skin contact with soil, sediment, surface water and ground water should be avoided.

8.0 PERSONAL PROTECTIVE EQUIPMENT

The initial level of protection required for each task is provided in Section 1.0 and Table 9-1. The individual PPE required for each task is listed in the JHAs. Table 9-1 summarizes the PPE required for all tasks to be conducted by MACTEC workers. The level of protection may be upgraded or downgraded according to the action guidelines provided in Section 7.0. Level of PPE used each day shall be indicated in the Field Logbook. When using PPE, workers must adhere to the company's Personal Protective Equipment Program (ESH Program 2.9.D) and OSHA regulations (29 CFR 1910.120[g] and 29 CFR 1910 Subpart I).

If respirators are worn, workers must adhere to the company's Respiratory Protection Program (ESH Program 2.9.C) and OSHA regulations (29 CFR 1910.134). Table 3.1 provides a record of the site

Table 7-2
Air Monitoring Action Level Summary
THE ACTION LEVELS BELOW ARE FOR THE CONTAMINANTS OF CONCERN IDENTIFIED ABOVE. ADJUST FOR THE SPECIFIC CONTAMINANTS AT YOUR SITE

PID/FID Reading[1,2]	Detector Tube[1] Benzene	Detector Tube[1] Vinyl Chloride	Dust Meter[1]	LEL[2]/O_2[1]	Action	Level of PPE
< 0.5 ppm[2]	–	--	< 1.5 mg/m^3		Continue to monitor with PID	Level D / Modified Level D
≥ 0.5 ppm[1]	< 0.5 ppm	< 0.5 ppm			Begin monitoring breathing zone with PID and benzene DT.	Level D / Modified Level D
0.5 – 4 ppm[1]	< 0.5 ppm	< 0.5 ppm	< 1.5 mg/m^3		Continue to monitor with PID and DT	Level D / Modified Level D
≥ 4 ppm[1] to 75 ppm	≥ 0.5 ppm to 5 ppm	< 0.5 ppm	≥ 1.5 mg/m^3		Continue to monitor with PID and DT	Level C
≥ 75 ppm[1]	≥ 5 ppm	≥ 0.5 ppm	≥ 15 mg/m^3		Stop work and evacuate area, Notify SSHO	Level B
				> 10% LEL[2]	Stop work. Evacuate area. If action levels continue to be exceeded, contact SHSO, consider return with ventilation system and spark proof/intrinsically safe equipment.	Back Off
				< 19.5% O2[1] > 23.5% O2[1]	Stop work and evacuate area, Notify SSHO	Level B

[1] Monitor breathing zone
[2] Monitor source (e.g., well, cuttings, borehole, etc.)

Table 9-1
PPE and Monitoring Requirements Summary
To select PPE, double click on boxes and change the default value to "checked"

Initial Level of PPE *				
☐ Level D	☒ Modified Level D	☐ Level C	☐ Level B	☐ Level A
Standard PPE				
☒ Hard Hat	☒ Safety shoes	☒ Safety glasses	☐ Boot Covers	☐ Rubber Boots	☐ Aprons	☒ High Visibility Vest
Eye and Face Protection				
☐ Welding glasses	☐ Welding helmet	☐ Face shield	☐ Chemical goggles	☐ Welding screens
Hearing Protection				
☒ Ear plugs	☐ Ear Muffs	☐ Ear plugs and muffs	☐ Other _____	
Respiratory Protection				
☒ None	☐ Upgrade Only	☐ Full Face APR	☐ Half Face APR	Cart. Type: MSA GMC or Equivalent	☐ PAPR
☐ Airline respirator	☐ SCBA	☐ Dust mask	☐ _____	
Protective Clothing				
☐ Tyvek® coveralls	☐ Poly-coated Tyvek®	☐ Saranex® Coveralls	☐ Fully encapsulating suit
☐ Cotton coveralls	☐ Modesty Clothing	☐ Fire resistant clothing	☐ Other _____
Hand Protection				
☐ None	☐ Cotton gloves	☒ Leather gloves	☐ Cut-resistant gloves	☐ Glove liners
Outer Gloves				
☐ Nitrile	☐ Viton®	☐ Butyl	☐ Neoprene	☐ Other _____
Inner Gloves				
☒ Nitrile	☐ Vinyl	☐ Latex	☐ Other _____	
Monitoring Requirements				
☐ Oxygen	☐ Flammable gases/vapors	☐ Toxic Gas/vapors	☐ Hydrogen Sulfide	Carbon Monoxide
☐ Asbestos	☐ Full time IH coverage	☐ Part time IH coverage	☐ Be, Hg, Cr, Pb
☐ Metals Specify: _____			
☐ Organic Vapors Specify: _____			
☐ None	☐ TLD required	☐ CAM	☐ Radon
☐ Full time RCT coverage	☐ Part time RCT coverage	☐ Radioactive air particulates	☐ Other _____
☐ Other _____		☐ Other _____	

workers' last annual fit test. Beards (e.g., facial hair interfering with the respirator seal) are not allowed when respirators are worn.

9.0 DECONTAMINATION

PPE shall be decontaminated as per 29 CFR 1910.120(k) and MACTEC ESH 2.9.A. The decontamination procedures, equipment, and decontamination solution required for each task are provided in Appendix C and the JHA – Decontamination.

Re-usable safety gear will be washed with soap and water prior to re-use or removing from the work zone. Sampling tools, etc. will be decontaminated as described in the W*ork Plan*, or as directed by the SHSO. All drilling fluids and cuttings will be handled in accordance with the *Work Plan*. The disposition of this material and disposable safety gear will be the responsibility of the site owner. Safety gear that cannot be decontaminated will be disposed of as an investigative derived waste (IDW) in accordance with the Work Plan.

10.0 EMERGENCY RESPONSE

The following emergency response information is provided as per 29 CFR 1910.120(j), MACTEC ESH 2.9.A – Hazardous Waste Operations an Emergency Response Program..

10.1 HOSPITALS/CLINICS

A nearby Hospital (for emergency injuries needing immediate treatment) and a clinic (for non-emergency injuries) have been identified.

The hospital to be used for emergency treatment is (See Figure 11.1 for Route Map to Hospital):.

Parkway Hospital, 7335 113th St., Flushing, NY 11375, 781-990-4100

The clinic to be used for non-emergency treatment is (See Figure 11.2 for Route Map to Clinic):

Urgent Care Clinic, 8212 151st Ave, Howard Beach, NY 11414, 718-843-5100

10.2 EMERGENCY CONTACTS

A list of contacts and telephone numbers for the applicable local off-site emergency responders is provided in Table 11.1. The nature of the site work and contaminants of concern should be reviewed and the ability of off-site responders to respond to reasonably anticipated emergencies should be confirmed. If there are any concerns with off-site responsibilities they should be contacted directly.

10.3 EMERGENCY RESPONSE EQUIPMENT

The following emergency response equipment is required for this project and shall be readily available.

- ☒ Field First Aid Kit (including Bloodborne Pathogen kit/supplies)
- ☒ Fire Extinguisher
  - ☐ Type A (Combustible materials)
  - ☐ Type B (Flammable liquids and gases)

- ☐ Type C (Doesn't conduct electricity – to be used on electrical equipment)
- ☒ Type ABC

☐ Eyewash (Note: 15 minutes of free-flowing fresh water

☐ SCBA

☐ Shower

☐ Other: Respirator

TABLE 11.1

EMERGENCY CONTACTS

NAME	TELEPHONE NUMBERS		DATE OF PRE-EMERGENCY NOTIFICATION (if applicable)
Fire Department:	911		
Hospital:	718-990-4100		
Police Department:	911		
Site Health And Safety Officer: Dave Side	Office: 215-619-0292	Cell:610-496-0854	
Client Contact: Mike Curtis	Office: 312-917-0310		
Project Manager: Dave Side	Office: 215-619-0292	Cell:610-496-0854	
Division ES&H Manager: Cindy Sundquist	Office: 207-828-3309	Home: 207-892-4402 Cell: 207-650-7593	
EPA (if applicable):			
OTHER: Ambulance	911		

10.4 COMMUNICATIONS

On-site communications will be conducted through the use of:

- ☒ Verbal
- ☐ Two-way radio _____

☒ Cellular telephone
☒ Hand signals
- Hand gripping throat _____ Out of air, can't breathe
- Grip partner's wrist or both hands around waist _____ Leave area immediately
- Hands on top of head _____ Need assistance
- Thumbs up _____ OK, I am all right, I understand
- Thumbs down _____ No, negative

☐ Horn/Siren
☐ Other: _____

Off-site communications will be conducted through the use of:

☒ Cellular telephone
☐ Landline/Pay phone - location: _____
☐ Other: _____

10.5 EMERGENCY RESPONSE PROCEDURES

In the event that an on-site emergency develops, the procedures delineated in Table 11.2 are to be immediately followed.

TABLE 11.2

EMERGENCY PROCEDURES

- The SHSO (or alternate) should be immediately notified via the on-site communication system. The SHSO assumes control of the emergency response.
- The SHSO notifies the Project Manager and client contact of the emergency. The SHSO shall then contact the Northern Division Environment, Health, and Safety (ES&H) Manager who will then contact the Corporate Director of ES&H.
- If applicable, the SHSO shall notify off-site emergency responders (e.g. fire department, hospital, police department, etc.) and shall inform the response team as to the nature and location of the emergency on-site.
- If applicable, the SHSO evacuates the site. Site workers should move to the predetermined evacuation point (See Site Map).
- For small fires, flames should be extinguished using the fire extinguisher. Large fires should be handled by the local fire department.
- In an unknown situation or if responding to toxic gas emergencies, appropriate PPE, including SCBAs, should be donned.
- If chemicals are accidentally spilled or splashed into eyes or on skin, use eyewash and/or shower.

- If a worker is injured, first aid shall be administered by certified first aid provider.
- Before continuing site operations after an emergency involving toxic gases, the SHSO shall don a Self Contained Breathing Apparatus (SCBA) and utilize appropriate air monitoring equipment to verify that the site is safe.
- An injured worker shall be decontaminated appropriately.
- After the response, the SHSO shall follow-up with the required company reporting procedures, including the Incident Analysis Forms (Appendix D).

Injuries requiring medical treatment beyond first aid (as well as work-related vehicle incidents) will require the employee to submit a post incident drug test. It is the responsibility of the Supervisor/PM to ensure that the employee who has had an on-the-job incident as defined in MACTEC Human Resource Policy HR4-02B, Drug and Alcohol-Free Workplace Policy for Employees (in Section 3.2), submits to this required testing. The policy is located on the MACTEC Intranet under Human Resources for further information. The *Procedures for Post Accident and Reasonable Suspicion Testing* may be found on the Intranet (via the Incident Reporting Procedures link under "Medical Treatment"). Contact Cindy Sundquist, NDIV ES&H Manager, at (207) 828-3309, or Collette Myers at 770-360-0607, if you have any questions on incident-related drug testing.

10.5.1 MACTEC Triage Program

If the emergency involves an injury to a MACTEC employee, the LHSR or Field Lead are to implement the MACTEC Triage program. Employees whose injuries are true emergencies and who need immediate medical attention will bypass this program and are to be immediately sent/taken to the hospital identified in Section 10.1.

For non-emergency injuries, the Supervisor (Field Lead or PM if on site) and the injured employee will contact the MACTEC Triage Management and Reporting Line at **1-800-350-4511** "Report an Injury for MACTEC" at AllOne Health (AOH) and speak to a nurse case manager. The case nurse manager will perform the intake process and ask for information including the following:

- Description of injury and details of incident
- Pertinent employee contact information and job information

From this, a collaborative decision will be made between the nurse and employee on the most appropriate place for treatment; either the hospital (see the hospital identified in section 11.1), a clinic (see clinic identified in section 11.1) or onsite first aid

If the employee is to be sent to a clinic or hospital, the nurse will call ahead to explain the situation, the need for testing, and advises options to avoid OSHA recordable & considerations for return to work & transitional/modified duty. The Nurse will also arrange for drug and alcohol testing to be conducted at the hospital/clinic. If the employee is to be treated on site (First Aid), the Nurse will advise the employee to call if injury gets worse. Figure 11.3 is a flow diagram that describes this procedure.

Within 24 hours after any emergency response, the Incident Analysis Report (and Vehicle Incident Report if vehicle incident), provided in Appendix D, shall be completed and returned to the Division ES&H Manager, who will forward a copy to the Corporate ES&H Manager and General Counsel.

10.6 BLOODBORNE PATHOGENS

In the absence of an infirmary, clinic, hospital, or physician, that is reasonably accessible in terms of time and distance to the worksite, a person who has a valid certificate in first-aid training shall be available at the worksite to render first aid or CPR. Provisions shall be made, prior to commencement of the project, for prompt medical attention in case of serious injury. All employees who work on a site where bloodborne pathogens are known to be present or who have been designated, as a part of their work duties at the site, to respond to all first aid injuries, will have received bloodborne pathogen training at the time of initial assignment and annually thereafter.

10.6.1 Universal Precautions

Universal precautions is a method of infection control, which operates on the assumption that all human blood and bodily fluids are to be treated as if they are known to be infectious for Human immunodeficiency Virus, Hepatitis B virus, Hepatitis C virus, or other bloodborne pathogens. Universal Precautions will be observed to prevent contact with blood or other potentially infectious materials. All body fluids are to be considered potentially infectious materials.

Universal precautions consist of the following practices:

- All workers will protect their skin and mucous membranes against contact with blood or other bodily fluids. At a minimum, gloves and safety glasses shall be donned prior to administering first aid or otherwise touching blood and body fluids, mucous membranes, or non-intact skin and for handling items or surfaces contaminated with blood or bodily fluids. Note: the gloves used selected to be used at this site to protect against chemical exposure will also protect against bloodborne pathogens.
- All first aid procedures involving blood or other potentially infectious materials will be performed in such a manner as to minimize splashing, spraying, spattering, and generation of droplets and aerosols of these substances.
- When there is a risk of exposure to the eyes, nose and mucous membranes from the generation of droplets of blood or other body fluids, masks and face shields shall be worn.
- Uncoated or polycoated Tyveks (or the suits provided in some bloodborne pathogen kits, shall be worn during procedures that are likely to generate splashes of blood or other body fluids.
- Hands and other skin surfaces shall be washed immediately and thoroughly if contaminated with blood or other bodily fluids. Flush mucous membranes with water immediately or as soon as feasible following contact of such body areas with blood or other potentially infectious materials.
- Hands must be washed with soap and water immediately or as soon as feasible after removal of gloves or other PPE used to perform first aid. When provision of hand washing facilities is not feasible, use appropriate antiseptic hand cleanser in conjunction with clean cloth/paper towels or antiseptic towelettes. When antiseptic hand cleansers or towelettes are used, hands shall be washed with soap and running water as soon as feasible.
- CPR masks or other ventilation devices will be available for use in areas in which the need for resuscitation is foreseeable.

All site first aid kits shall include bloodborne pathogen kits or supplies. These kits typically include, at a minimum, the CPR mask, gloves, safety glasses, and a red bag.

10.6.2 Decontamination/Laundering

If a garment(s) is penetrated by blood or other potentially infectious materials, the garment(s) shall be removed immediately or as soon as feasible. All PPE shall be removed prior to leaving the work area. When PPE is removed it shall be placed in an appropriately designated area or container for storage, washing, decontamination or disposal. In many States where waste is incinerated, if the blood doesn't drip from a material when

compressed or if there is no risk of it flaking off during handling, the materials can be disposed of in the regular trash and does not need to be handled as bio-hazardous materials.

If personal clothing should become contaminated with blood or other body fluids, it shall be collected, bagged or containerized and appropriately labeled. Contaminated laundry shall be handled as little as possible with a minimum of agitation.

All equipment and environmental/working surfaces shall be cleaned and decontaminated with an appropriate disinfectant immediately after contact with blood or other potentially infectious materials or as soon as feasibly possible. A solution of one part bleach to nine parts water can be mixed and used as a disinfectant to clean/wipe down equipment and other surfaces.

Broken glassware or other sharps which may be contaminated shall not be picked up directly with the hands. It shall be cleaned up using mechanical means, such as a brush and dust pan, tongs, or forceps and disposed of in a sturdy container.

10.6.3 Vaccines, Evaluation, Follow-Up

Hepatitis B vaccines will be available to all MACTEC employees who may have an occupational exposure. Post-exposure evaluation and follow-up will be conducted on all employees who have had an exposure incident.

FIGURE 11.1

Directions to Hospital

Total Time: 9 minutesTotal Distance: 4.48 miles

A: 6960 188th St, Fresh Meadows, NY 11365-3771

1:	Start out going SOUTH on 188TH ST/SAUL WEPRIN ST toward 73RD AVE.	0.8 mi
2:	Merge onto GRAND CENTRAL PKWY W via the ramp on the LEFT toward TRIBORO BR.	2.6 mi
3:	Take the UNION TPKE exit, EXIT 15, toward RT-25 W/QUEENS BLVD.	0.2 mi
4:	Stay STRAIGHT to go onto UNION TURNPIKE.	0.2 mi
5:	Take the QUEENS BLVD ramp toward RT-25 W.	0.1 mi
6:	Turn RIGHT onto QUEENS BLVD.	0.3 mi
7:	Turn RIGHT onto 76TH RD.	0.0 mi
8:	Turn LEFT onto 113TH ST.	0.2 mi
9:	End at 7335 113th St Flushing, NY 11375	

B: 7335 113th St, Flushing, NY 11375

Total Time: 9 minutesTotal Distance: 4.48 miles

FIGURE 11.2

Directions to Clinic

188th St
Queens, NY 11365

1. Head **west** on **Horace Harding Expy** toward **187th St**

0.7 mi

2. Merge onto **I-495 W** via the ramp on the left to **L I Expy/Midtown Tun**

2.1 mi

3. Take exit **22A** for **Grand Central Pkwy** toward **108 St**

0.3 mi

4. Keep left at the fork to continue toward **Grand Central Pkwy**

0.2 mi

5. Keep right at the fork, follow signs for **Grand Central Pkwy/Kennedy Airport**

0.3 mi

6. Keep left at the fork to continue toward **Grand Central Pkwy** and merge onto **Grand Central Pkwy**

1.9 mi

7. Take exit **13S** to merge onto **I-678 S** toward **Kennedy Airport**

3.4 mi

8. Take exit **1W** toward **Verrazano Bridge**

0.4 mi

9. Slight right at **N Conduit Ave**

1.9 mi

10. Take the exit toward **Cross Bay Blvd**

0.2 mi

11. Turn left at **Cross Bay Blvd**

0.1 mi

12. Turn right at **153rd Ave**

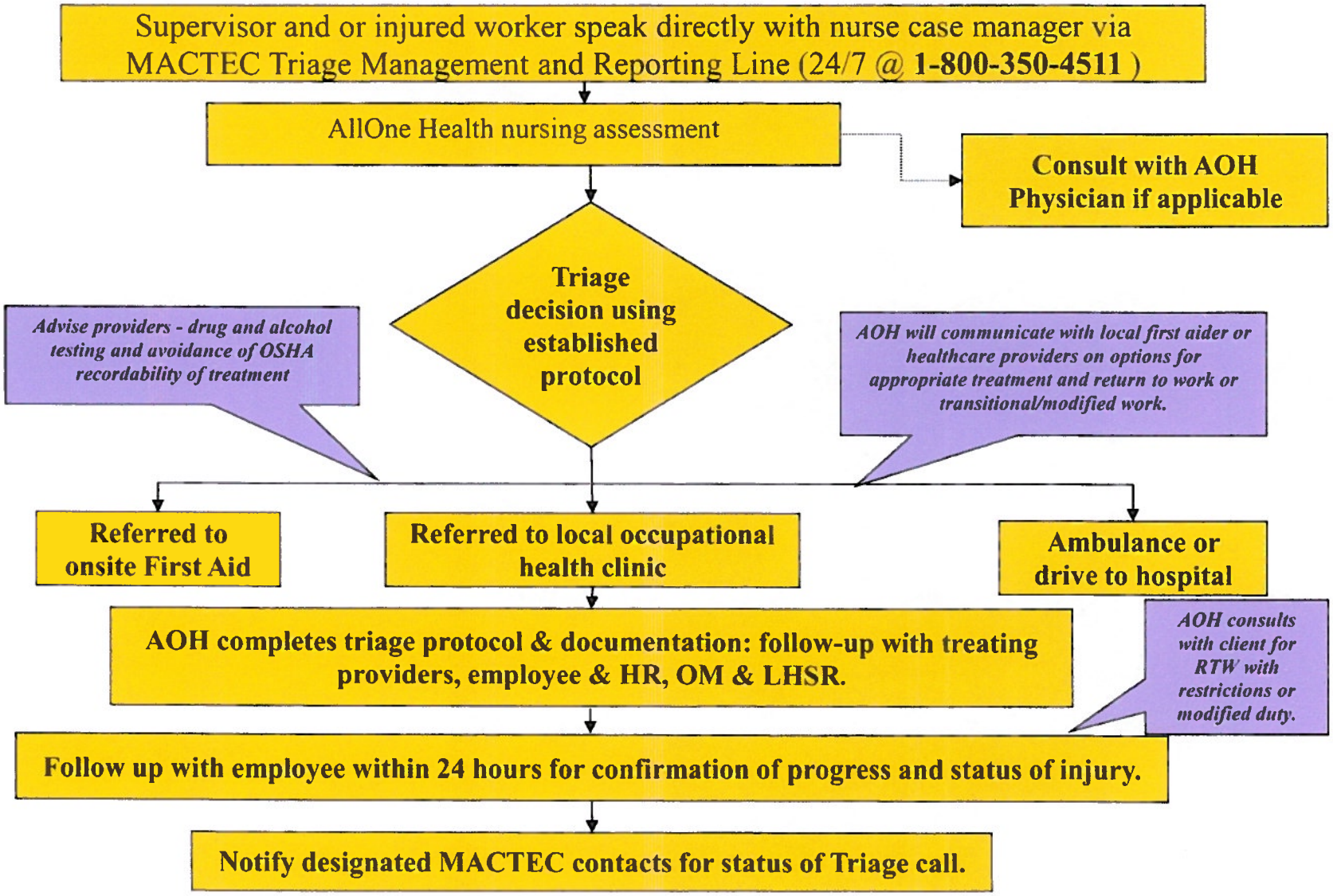
0.2 mi

13. Take the 1st right onto **151st Ave**

0.4 mi

82-12 151st Ave
Queens, NY 11414

FIGURE 11.3
TRIAGE PROGRAM FLOW DIAGRAM



11.0 CONFINED SPACE ENTRY

Yes	No	
☐	☒	The task(s) for this project involve confined space entry.

If yes, see applicable JHA in Appendix B.

12.0 SPILL CONTAINMENT

Yes	No	
☐	☒	The task(s) for this project involve drum/tank/container sampling, excavation, transportation, etc.

If yes, see Appendix J for spill containment procedures. Refer to MACTEC ESH Procedure 2.14.3 – Spill Containment for further information

13.0 HAZARD COMMUNICATION

The following procedures shall be followed for all chemicals brought on site (e.g., decontamination solution, sample preservatives, etc.): **MAKE SURE THAT THE NAME OF CHEMICALS LISTED BELOW THAT ARE BROUGHT TO THE SITE EXACTLY MATCH THE NAME AS SHOWN ON THE LABLE AND MSDS!)**

- Chemical containers (primary and secondary) shall be correctly and clearly labeled with the name of the chemical and the hazard(s) associated with that chemical (e.g. flammable, corrosive, etc.).
- If chemicals are transferred to a secondary container, that container will be labeled with the name of the chemical and the hazard warnings.
- Workers will have received training on the hazards of these chemicals as indicated in Table 3.1.
- A Material Safety Data Sheet (MSDS) for each chemical listed below is included in Appendix E.

Acetone	
Alconox	
Bentonite	
Diesel fuel	
Gasoline	
Hydrochloric Acid (HCl)	
Liquinox	
Methanol	
Silica Cement	

When chemicals are used on site, workers must adhere to the company's Hazard Communications Program (ESH Program 2.9.E) and the OSHA regulation (29 CFR 1910.1200).

14.0 RECORDKEEPING

At the end of the project, the following items shall be maintained in the project file:

- ☒ HASP
- ☒ Incident Analysis/Vehicle Incident Forms (if applicable)
- ☒ Industrial Hygiene/Air Monitoring information (results and documentation - send copies to C. Sundquist)
- ☒ Log notebooks

APPENDIX A

CONTAMINANT FACT SHEETS

APPENDIX B

JOB HAZARD ANALYSIS PER TASK(S)

Form ESH-2.9.1-3.3

APPENDIX C

DECONTAMINATION PROCEDURES & EQUIPMENT PER TASK(S)

APPENDIX C1

DECONTAMINATION PROCEDURES & EQUIPMENT

Task(s) _____
Decontamination Solution: Detergent and Water

LEVEL D		
Station 1:	Equipment Drop	Deposit equipment used on-site (tools, sampling devices and containers, monitoring instruments, radios, etc. on plastic drop cloths. Segregation at the drop reduces the probability of cross contamination. During hot weather operations, a cool-down station may be set up within this area.
Station 2:	Outer Boots, and Gloves Wash and Rinse (if worn)	Scrub outer boots, and outer gloves decon solution or detergent water. Rinse off using copious amounts of water.
Station 3:	Outer Boot and Glove Removal (if worn)	Remove outer boots and gloves. Deposit in plastic bag.
Station 4:	Inner glove removal	Remove inner gloves and place in plastic bag.
Station 5:	Field Wash	Hands and face are thoroughly washed. Shower as soon as possible.

APPENDIX C2

DECONTAMINATION PROCEDURES & EQUIPMENT

Task(s) _____
Decontamination Solution: Detergent and Water

MODIFIED LEVEL D & LEVEL C		
Station 1:	Equipment Drop	Deposit equipment used on-site (tools, sampling devices and containers, monitoring instruments, radios, etc. on plastic drop cloths. Segregation at the drop reduces the probability of cross contamination. During hot weather operations, a cool-down station may be set up within this area.
Station 2:	Outer Garment, Boots, and Gloves Wash and Rinse	Scrub outer boots, outer gloves, and splash suit with decon solution or detergent water. Rinse off using copious amounts of water.
Station 3:	Outer Boot and Glove Removal	Remove outer boots and gloves. Deposit in container with plastic liner.
Station 4: (Level C only)	Canister or Mask Change	If worker leaves exclusion zone to change canister (or mask), this is the last step in the decontamination procedure. Worker's canister is exchanged, new outer gloves and boot covers are donned, joints are taped, and worker returns to duty.
Station 5:	Boot, Gloves and Outer Garment Removal	Boots, chemical resistant splash suit, and inner gloves are removed and deposited in separate containers lined with plastic.
Station 6: (Level C only)	Face Piece Removal	Facepiece is removed. Avoid touching face with fingers. Facepiece is deposited on plastic sheet.
Station 7:	Field Wash	Hands and face are thoroughly washed. Shower as soon as possible.

APPENDIX C3

DECONTAMINATION PROCEDURES AND EQUIPMENT

Task(s) _____
Decontamination Solution: Detergent and Water

LEVEL B		
Station 1:	Equipment Drop	Deposit equipment used on site (tools, sampling devices and containers, monitoring instruments, radios, etc.) on plastic drop cloths. Segregation at the drop reduces the probability of cross contamination. During hot weather operations, a cool-down station may be set up within this area.
Station 2:	Outer Garment, Boots, and Gloves Wash and Rinse	Scrub outer boots, outer gloves, and splash suit with decon solution or detergent water. Rinse off using copious amounts of water.
Station 3:	Outer Boot and Glove Removal	Remove outer boots and gloves. Deposit in container with plastic liner.
Station 4:	Tank Change	If worker leaves exclusion zone to change air tank, this is the last step in the decontamination procedure. Worker's air tank is exchanged, new outer gloves and boot covers are donned, joints are taped, and worker returns to duty.
Station 5:	SCBA Backpack, Boot, Gloves and Outer Garment Removal	SCBA backpack is removed and placed on plastic sheets. Boots, chemical resistant splash suit, and inner gloves are removed and deposited in separate containers lined with plastic.
Station 6:	Face Piece Removal	SCBA facepiece is removed. Avoid touching face with fingers. Facepiece is deposited on plastic sheet.
Station 7:	Field Wash	Hands and face are thoroughly washed. Shower as soon as possible.

APPENDIX D

INCIDENT ANALYSIS FORMS

Check one
Initial Report: ☐
Update: ☐ Date: _____
Final Report: ☐

Category C: ☐
Category B: ☐
Category A: ☐

INCIDENT ANALYSIS REPORT

Attorney-Client Work Product Prepared in Anticipation of Litigation

(Review instructions on page 9 prior to completing this form)

Local Office ID Number: _____

To: Office of the General Counsel

This information has been prepared at your request and under your direction in anticipation of litigation so that you may prove appropriate legal advice to the undersigned and the management of the Company.

Section 1 – General Information

Report Date: _____ Incident Date: _____ Time of incident: _____

Employee Name: _____ Sex: ☐ M ☐ F

Job Title: _____ Hire Date: _____ Time employee began work: _____

Department: _____ Project Manager: _____ Client: _____

Office where employee works from: _____ Immediate Supervisor: _____ Hours employee worked during last 7 days: ____ hrs

Location where incident occurred: _____ Is this a Company controlled work site: ☐ Yes ☐ No

Section 2 – Incident Type (mark all that apply)

A. Type of incident being reported:

☐ Near Miss ☐ First-aid Case ☐ Medical Treatment ☐ Hospitalization ☐ Day Away Case ☐ Restricted/Transfer Case
☐ Fatality ☐ Vehicle Incident ☐ Notice of Violation ☐ Regulatory Inspection ☐ Environmental Release
☐ Property Damage ☐ Other (please describe): _____

B. If an **injury or illness** - describe the part of the body that was affected and how it was affected:

C. If an **environmental release** - describe the quantity and name and CAS# of material released into the environment:

D. If an **inspection by a regulatory agency** - what agency, who were the inspectors, and supply inspector contact information:

Section 3 – Incident Description (Attach and number additional pages, as needed, to ensure **all details related to the incident are captured.**)

A. List the names of all persons involved in the incident, and employer information:

B. List the names of any witnesses, their employer, and a local/company telephone number or address:

C. What was the employee(s) doing just prior to the incident?

D. Explain in **detail** what happened?

E. Explain in **detail** what object or substance directly harmed the employee?

F. List any damaged equipment or property (other than motor vehicles) model and serial number **and** estimated costs to repair/replace damaged equipment or property, if applicable:

Section 4 - Incident Analysis

A. Was a Job Hazard Analysis (JHA) completed for the work being performed? YES ☐ NO ☐ Who prepared the JHA?

B. When and who was the last safety officer (i.e. LHSR, supervisor, Division ES&H Manager, etc.) at your work site?

C. When and what safety training **directly related** to the incident has the person(s) involved had?

Section 5 - Incident Investigation Results

#	**Causal Factors** (Attach and number any additional pages as needed to completely address this section)
1	
2	
3	
4	
5	

Root Cause(s) Analysis (The below items represent major root cause categories which have been determined to be Less Than Adequate (LTA). A more detailed determination of the root cause will be facilitated, if needed, by your Division's ES&H Manager.)

1. Equipment Reliability Program Implementation	5. Training
2. Administrative / Management Systems	6. Immediate Supervision
3. Procedures	7. Communications
4. Human Factors Engineering	8. Personal Performance

Root Cause #	Corrective Actions to be taken (Attach additional pages as needed to completely address this section)	Responsible Person	Proposed Completion Date	Closed on Date	Verified by and Date Verified

Section 6 – Notifications, Certification & Approvals

Check the appropriate boxes indicating the applicable reports have been made to the following organizations:

Auto Lessor ☐ **Insurer** ☐ **Workers' Compensation Administrator** ☐

Post-incident Substance Abuse Testing Has Been Performed ☐

Incident investigated by (signatures):			
Employee(s):	Date:	Employee's Supervisor:	Date:
Project Manager:	Date:	Office Manager:	Date:
LHSR:	Date:	Division ES&H Manager:	Date:

ATTACHMENT 2
VEHICLE INCIDENT REPORT

Attorney-Client Work Product Prepared in Anticipation of Litigation
(Review instructions on page 12 prior to completing this form)

Section 1 - General Information

Date of incident: _____

Time incident occurred: _____ ☐ AM ☐ PM Illumination: ☐ Dark ☐ Light Road Condition: ☐ Dry ☐ Wet ☐ Icy/snow

Were police summoned to scene? ☐ Yes ☐ No Police Department and Location: _____

Report #: _____ Officer's Name and Badge Number: _____

Section 2 - Company Driver and Vehicle

Driver's name: _____ D/L # _____ State: _____

Driver's home office address: _____ Driver's Phone # _____

Company Vehicle # _____ Year _____ Model _____ License # _____ State _____

Company car? ☐ Yes ☐ No Owned by employee? ☐ Yes ☐ No

Leased/rented from _____

Passenger/Witness Name(s) _____ Address: _____ Phone: _____

Passenger/Witness Name(s) _____ Address: _____ Phone: _____

Passenger/Witness Name(s) _____ Address: _____ Phone: _____

Damage to vehicle: _____

Injuries to employee(s): _____

Injuries to others: _____

Vehicle was being used for: Company business ☐ Yes ☐ No Personal business ☐ Yes ☐ No

Towed: ☐ Yes ☐ No By Whom: _____ To Where: _____

Section 3 - Other Driver and Vehicle Information

Driver's Name: _____ D/L # _____ State _____

Current Address _____ City _____ State _____

Telephone Home: _____ Work: _____ Cell: _____

Reg. Owner's Name: _____ Address: _____ City: _____ State: _____
(verify registration document)

The Other Vehicle: Make _____ Model _____ Year _____ License # _____ State _____

Insurance company name: _____ Address: _____ Phone # _____

Policy No. _____ Contact Person _____ Phone # _____

Passenger/Witness Name(s) _____ Address: _____ Phone: _____

Passenger/Witness Name(s) _____ Address: _____ Phone: _____

Damage: (*Make note of pre-existing damage and take pictures if possible.* ***Attach additional pages as needed)***

Injuries to other driver/passengers:

Section 4 – Approvals (signatures required)

Form completed by: _____ Signature: _____ Date: _____

Things to Do First In The Event Of a Motor Vehicle Incident

1. Most important: **STOP.**
2. **Call 911 if there are injuries.**
3. Call for an officer if the incident occurred on public property (streets, highways or roads). Disputes often arise between the parties involved as to who was at fault; therefore, a police report is important. If an officer is unable to attend the scene of the accident, a counter police report may be filed at most stations. Insurance companies rely on police reports to determine liability.
4. Complete the Incident Investigation Report and the Vehicle Incident Report forms. It is important that both these forms are completed in detail. Include a diagram of the incident on the back of the report. Incomplete information may lead to delays in processing associated claims and in helping to prevent this type of incident from occurring again.
5. Express no opinion as to who was at fault. This is for the insurance companies to determine.
6. Give only information that is required by the authorities or as directed by MACTEC contractual requirements.
7. Sign only those statements required by the authorities or as directed by MACTEC contractual requirements. Do not sign away your rights or the company's rights.
8. If you are injured or think you were injured, tell your supervisor and see a physician. Your supervisor will notify MACTEC's Worker's Compensation insurance carrier, your Division's ES&H Manager and the Corporate Director of ES&H by phone, email or fax. For additional instructions on what to do, go to MACTEC's ES&H website on the intranet at:
   http://intranet.mactec.com/EnvSafetyHealth/HealthSafety_Claims_Reporting.htm
9. Your supervisor will forward both completed incident reports immediately to your Division's ES&H Manager.

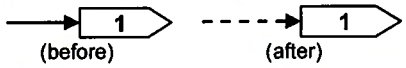
MACTEC, Inc.

Vehicle Crash Diagram

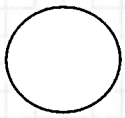
Instructions:

1. Number each vehicle and show directions 

2. Use a solid line to show path before incident and use a dotted line to show path after incient



3. Show pedestrian/non-motorist by: 
4. Show railroad by: 
5. Indicate north by arrow as: 
6. Show street or highway names or numbers
7. Show signs, signals, warning and traffic controls.



Indicate North
by Arrow

Prepared by: _____ Date: _____

APPENDIX E

MATERIAL SAFETY DATA SHEETS

(MSDS folder kept in all MACTEC vehicles)

APPENDIX F

SITE SAFETY ORIENTATION FORM

SITE SAFETY ORIENTATION

Project:_____ Site:_____

Project Number:_____ Date:_____

All applicable items listed below are to be reviewed on the first day of site activities and when new workers arrive on site. Training provider, please initial each item covered in the training, or note "NA" as applicable.

General Supervisor: ..... _____

Site Health and Safety Supervisor (SHSS): ..... _____

Employees' direct supervisor: ..... _____

Location of HASP and MSDS on site: ..... _____

Review of Contents of HASP ..... _____

HazCom labeling system if different from Local Operation: ..... _____

Site-specific medical surveillance requirements: ..... _____

Site control measures (location of exclusion zone, etc.): ..... _____

Safety and health hazards on site: ..... _____

The Level of Protection and specific PPE to be used: ..... _____

Work practices to be used on site to minimize exposure: ..... _____

Decontamination procedures: ..... _____

How to effectively use site/task engineering controls: ..... _____

Applicable elements of the site emergency response plan: ..... _____

Any other site-specific health and safety related requirements: ..... _____

Participating employees must print and sign their name in the spaces provided below:

_____ _____

_____ _____

_____ _____

_____ _____

APPENDIX G

DAILY TAILGATE SAFETY MEETING CHECKLIST

MACTEC ENGINEERING AND CONSULTING, INC.

DAILY TAILGATE SAFETY MEETING CHECKLIST

Project:		Site:	
Date:		Location:	

To be reviewed on the first day of site activities and when new workers arrive on site:

Alternate for Health & Safety:	
Location of on-site HASP:	
Site training requirements:	See HASP
Specific medical surveillance requirements:	See HASP

Agenda:
During the project, one or more of the agenda items could be selected for the required daily site training.

		Check-off: Date				
		___	___	___	___	___
1.	Planned work for this day (discuss)	☐	☐	☐	☐	☐
2.	Physical hazards and controls (discuss/review)	☐	☐	☐	☐	☐
3.	Chemical hazards and controls (discuss/review)	☐	☐	☐	☐	☐
4.	Biological hazards and controls (discuss/review)	☐	☐	☐	☐	☐
5.	Personal protective equipment Modified D	☐	☐	☐	☐	☐
6.	Personal protective equipment required per the hazard assessment:	☐	☐	☐	☐	☐

SPECIFY TYPE	
Protective coveralls	
Safety glasses/goggles	ANSI approved
Hard hat	ANSI approved
Foot protection	Safety toe boots & overboots
Work gloves	
Chemical gloves	Neoproene outer, nitrile inner
Hearing protection	
Other	

7.	Review inspection, decontamination, and maintenance procedures and the limitations of the above stated PPE.	☐	☐	☐	☐	☐
8.	Decontamination procedure (discuss/review)	☐	☐	☐	☐	☐
9.	Exclusion zone maintained	☐	☐	☐	☐	☐
10.	Site emergency response plan (discuss/review)	☐	☐	☐	☐	☐
11.	Signs and symptoms of overexposure to chemicals anticipated on site	☐	☐	☐	☐	☐
12.	General health and safety rules	☐	☐	☐	☐	☐
13.	Specific health and safety requirements relating to site activities including: (discuss/review)	☐	☐	☐	☐	☐
14.	Drilling/boring	☐	☐	☐	☐	☐
15.	UST	☐	☐	☐	☐	☐
16.	Excavations (including UG utility locations)	☐	☐	☐	☐	☐
17.	Heavy equipment	☐	☐	☐	☐	☐
18.	Slips, trips, and falls	☐	☐	☐	☐	☐
19.	Lockout/tagout	☐	☐	☐	☐	☐
20.	Working in temperature extremes	☐	☐	☐	☐	☐
21.	Rain or other weather advisories	☐	☐	☐	☐	☐
22.	Other health & safety issues (discuss/note)	☐	☐	☐	☐	☐

MACTEC ENGINEERING AND CONSULTING, INC.

DAILY TAILGATE SAFETY MEETING CHECKLIST

I have participated in the daily safety meeting discussing the topics indicated on the reverse and fully understand my responsibility for complying with all health and safety requirements. I have had the opportunity to have my questions on site health and safety issues and procedures answered.

Employee Name	Employee Signature	Date

Name and Signature of person conducting training

Date

APPENDIX H

WEEKLY HEALTH AND SAFETY CHECKLIST

MACTEC, Inc.

WEEKLY SITE SAFETY AND HEALTH CHECKLIST

Site: _____ **Date:** _____

Project Number: _____ **Project Manager:** _____

Conducted by: _____

Names of MACTEC employee's onsite: _____

	Y	N	NA
HASP, Training and Documentation:			
1. Are emergency phone numbers posted?	☐	☐	☐
2. Are directions to the nearest emergency medical care posted?	☐	☐	☐
3. Is the OSHA Poster posted?	☐	☐	☐
4. Is there a SSHP at the site?	☐	☐	☐
a. Is it current and address all tasks?	☐	☐	☐
b. Does it address all know/suspected hazards?	☐	☐	☐
c. Are JHAs included for all tasks?	☐	☐	☐
d. Are employees following the procedures as outlined in the JHAs?	☐	☐	☐
e. Is it approved?	☐	☐	☐
f. Have all field members signed off that they have read it?	☐	☐	☐
5. Are there MSDSs for required materials/chemicals brought to the site?	☐	☐	☐
6. Are all containers properly labeled, as to content, hazard?	☐	☐	☐
7. Is there list of chemicals brought to the site? Do the names on the list match the name on the label and MSDS?	☐	☐	☐
8. Do applicable workers have their 40-hour initial training and are current in their refreshers?	☐	☐	☐
9. Do the Field Lead and Health and Safety Officer have Supervisory training?	☐	☐	☐
10. Are all applicable workers current in their physicals?	☐	☐	☐
11. Are Tailgate Safety Meetings taking place and documented?	☐	☐	☐
12. Are there means to minimize heat or cold stress on-site?	☐	☐	☐
13. Is eating, drinking, smoking, etc. only done in areas free from toxic materials?	☐	☐	☐
14. Are two people used to lift equipment or materials weighting more than 50 lbs.?	☐	☐	☐
15. Are the locations of electrical power lines and other utilities identified prior to digging or drilling?	☐	☐	☐
PPE and Monitoring Instruments:			
16. Does the PPE being worn match what is required in the HASP and JHAs?	☐	☐	☐
17. Is hearing protection worn when noise makes conversation difficult at a distance of 2 feet?	☐	☐	☐
18. Are approved respirators and cartridges worn when needed?	☐	☐	☐
a. Are cartridges changed daily, unless specified otherwise in the HASP?	☐	☐	☐
b. Are cartridges appropriate for the contaminants at the site?	☐	☐	☐
19. Are all air monitoring instruments identified in the HASP being used and calibrated daily, as required?	☐	☐	☐
a. Do employees know upgrade/downgrade action levels?	☐	☐	☐
First Aid:			
20. Are there eyewash bottles on-site? Solution not expired?	☐	☐	☐
21. Are first aid kits on-site and adequately stocked (including bloodborne pathogen equipment)?	☐	☐	☐
22. Is there always at least one person on site current in their first aid/CPR training?	☐	☐	☐
Fire Safety:			
23. Is there a charged fire extinguisher on-site?	☐	☐	☐
a. Have MACTEC workers, who would use extinguishers, received fire extinguisher training in past year?	☐	☐	☐
b. Are fire extinguishers visually inspected monthly and are the inspections documented?	☐	☐	☐
c. Have fire extinguishers been professionally inspected within the past year?	☐	☐	☐
24. Are flammable liquids (e.g., gasoline) being stored safety (e.g., in safety cans and 20 feet from combustibles)?	☐	☐	☐
25. Are flammable liquid dispensing systems bonded (metal to metal)?	☐	☐	☐
Compressed Gas:			
26. Are cylinders stored in a secure manner, with caps on, upright and protected from damage?	☐	☐	☐
27. Are cylinders protected from snow, rain, etc.?	☐	☐	☐
28. Are cylinder caps in place before cylinders are moved?	☐	☐	☐
29. Are fuel gas and oxygen cylinders stored a minimum of 20 feet apart?	☐	☐	☐
30. Are propane cylinders stored and used only outside of buildings?	☐	☐	☐
Vehicles:			
31. Are employees wearing their seat belts and not talking on cell phones while car is in motion?	☐	☐	☐
32. Do Company vehicles have the "How's my Driving" decals?	☐	☐	☐

	Y	N	NA
33. Are vehicles parked in a safe manner? Are traffic cones used, if required?	☐	☐	☐
34. Are company vehicle inspected weekly and the inspections documented?	☐	☐	☐
35. Are materials stored in vehicles in a neat, orderly and secure manner so that they won't become a distraction to the driver, become a projectile hazard in the event of a sudden stop or crash or fall from the vehicle when in transport?	☐	☐	☐
Electrical:			
36. Is at least a 10 foot clearance maintained between equipment and power lines?	☐	☐	☐
37. Are all electrically operated tools grounded?	☐	☐	☐
38. Are GFCI's used?	☐	☐	☐
39. Are exposed wiring and cords in good condition (not frayed or deteriorated)?	☐	☐	☐
40. Do extension cords have a grounding conductor?	☐	☐	☐
41. Are extension cords only used in one continuous length (not daisy chained)?	☐	☐	☐
42. Are extension cords kept out of wet areas?	☐	☐	☐
43. Has a lockout/tagout system been established, if required?	☐	☐	☐
Hand and Power Tools:			
44. Are tools and equipment used by employees in good condition or tagged out of service?	☐	☐	☐
45. Are guards and safety devices in place on power tools?	☐	☐	☐
Walking and Working Surfaces:			
46. Do stairways into trailers/buildings that have 4 steps or more, have hand rails?	☐	☐	☐
47. Is good housekeeping being maintained at the site?	☐	☐	☐
48. Are all ladders in good condition, stored against damage and properly secured when in use?	☐	☐	☐
49. Are approved manlifts provided for the lifting of personnel (e.g., cherry pickers, scissor lifts, etc.)?	☐	☐	☐
50. Are personnel in manlifts wearing approved fall protection devices when required?	☐	☐	☐
51. Is fall protection used when working at elevations greater than 6 feet?	☐	☐	☐
52. Are ladders inspected prior to use?	☐	☐	☐
53. Are all ladders in good condition and defective ladders tagged out of service?	☐	☐	☐
Scaffolding:			
54. Is scaffolding placed on a flat, firm surface?	☐	☐	☐
55. Are scaffold planks free of mud, ice, grease, etc.?	☐	☐	☐
56. On scaffolds where platforms are overlapped, is planking overlapped a minimum of 12 inches?	☐	☐	☐
57. Does scaffold planking extend over end supports between 6 to 18 inches (dependent upon platform length)?	☐	☐	☐
58. Are employees restricted from working on scaffolds during storms and high winds?	☐	☐	☐
59. Is required perimeter guarding (top rail, mid rail, and toe board) present?	☐	☐	☐
60. Has a competent person been designated to oversee scaffold construction and inspect daily?	☐	☐	☐
Excavations:			
61. Has entrance into excavations greater than 4 feet deep prohibited unless the following precautions are taken?	☐	☐	☐
a. The sides of excavations sloped or shored to prevent cave ins if over 5 feet deep?	☐	☐	☐
b. Excavations greater than 4 feet deep been monitored for hazardous atmospheres (i.e., LEL/O2)?	☐	☐	☐
c. Ladders or ramps used in excavations over 4 feet deep?	☐	☐	☐
d. Means of egress available so as to require no more than 25 feet of lateral travel?	☐	☐	☐
e. Excavation inspected daily by competent persons and documented?	☐	☐	☐
62. Is excavated material placed a minimum of 24 inches from the excavation?	☐	☐	☐
Heavy Equipment:			
63. Is heavy equipment shut down for fueling and maintenance?	☐	☐	☐
64. Are backup alarms installed and working on mobile equipment?	☐	☐	☐
65. Are riders prohibited on heavy equipment?	☐	☐	☐
66. Are guards and safety appliances in place and used?	☐	☐	☐
67. Are operators using the "three point" system when mounting/dismounting equipment?	☐	☐	☐
Confined Space Entry:			
68. Are there confined spaces at the site that MACTEC will be entering? If yes:	☐	☐	☐
a. Is the permit completely filled out and approved prior to entry?	☐	☐	☐
b. Are confined spaces thoroughly emptied of the hazardous substances prior to entry?	☐	☐	☐
c. Is ventilation provided prior to entry?	☐	☐	☐
d. Is air within the confined space tested for oxygen deficiency, LEL and toxic substances in that order?	☐	☐	☐
e. Is there an assigned safety standby outside the space who is adequately trained?	☐	☐	☐
f. Has a rescue plan been established?	☐	☐	☐
g. Is an entry supervisor present at each permit-required entry?	☐	☐	☐

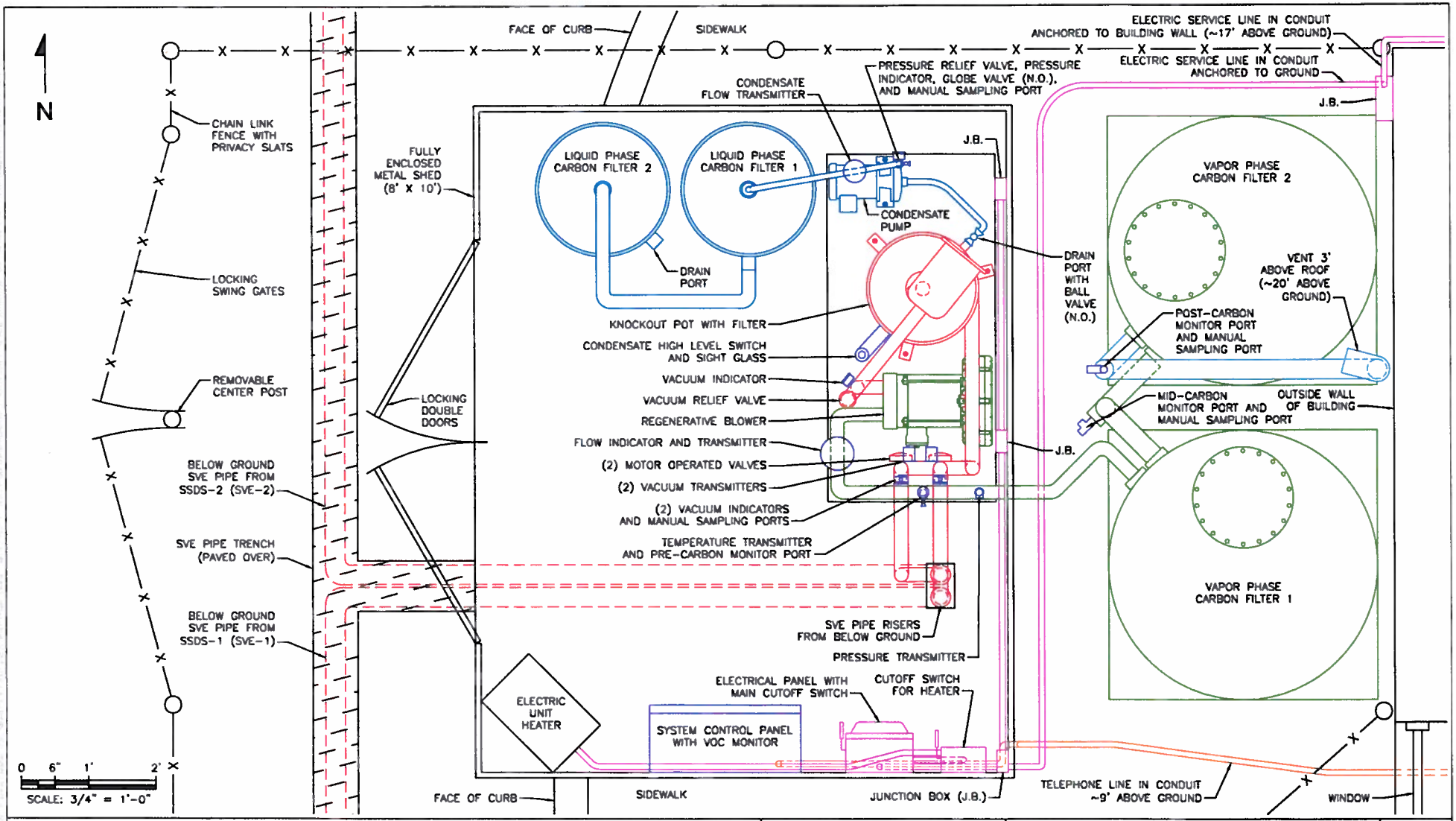
	Y	N	NA
h. Are required extraction/fall protection devices being used?	☐	☐	☐
Decontamination:			
69. Are decontamination stations set up on site?	☐	☐	☐
70. Is decontamination water properly contained and disposed of?	☐	☐	☐
71. Are all pieces of equipment inspected for proper decontamination before leaving the site?	☐	☐	☐
Working on or Near Water:			
72. Has a float plan been filed if working from a boat?	☐	☐	☐
73. Are personal floatation devices available and being used?	☐	☐	☐
74. Are Coast Guard requirements being followed when boating on navigable waters?	☐	☐	☐

Notes

Findings	Corrected on
1.	
2.	
3.	
4.	
5.	
6.	
7.	
8.	
9.	
10.	
11.	

APPENDIX D

EC DRAWINGS OF RECORD



LEGEND:

- SVE PUMP INLET PIPING
- SVE PUMP OUTLET PIPING
- FILTERED AIR DISCHARGE
- CONDENSATE PIPING
- ELECTRICAL SERVICE
- TELEPHONE SERVICE
- INSTRUMENTATION, CONTROL, AND SAMPLING
- BALL VALVE
- N.O. NORMALLY OPEN
- J.B. JUNCTION BOX

MACTEC
Engineering and Consulting, P.C.
751 Arbor Way, Suite 180
Blue Bell, Pennsylvania 19422-1960

APPENDIX D
SSDS RECORD DRAWING
FINAL ENGINEERING REPORT
New York Express Dry Cleaners
Queens Tax Map Block 7115, Lot 30 (formerly known as part of Lot 2)

Project No. 3485050051

DATE: MAY 2016
DRAWN BY: SPM
CHECKED BY: DS