DECISION DOCUMENT

United Cleaners
Henrietta, Monroe County
Site No. 828152
May 2013

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

DECLARATION STATEMENT - DECISION DOCUMENT

United Cleaners
Henrietta, Monroe County
Site No. 828152
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Statement of Purpose and Basis

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

Description of Selected Remedy

Based on the interim remedial measures completed to address contaminated soils, and soil vapor intrusion in the on-site commercial structure no further action is required other than the implementation of institutional and engineering controls. Engineering controls include the inspection and maintenance of the existing sub-slab depressurization system in the commercial building to address soil vapor intrusion, and the continued monitoring of the existing groundwater monitoring wells. Institutional controls include an environmental easement which restricts the use of the property to commercial and industrial uses, restricts groundwater use, and requires the implementation of a Site Management Plan. The Site Management Plan includes provisions for maintaining the institutional and engineering controls.

Declaration

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

5/23/2013

Date

Michael Cruden, Director
Remedial Bureau E

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SECTION 1: SUMMARY AND PURPOSE OF THE PLAN

The New York State Department of Environmental Conservation (the Department), in consultation with the New York State Department of Health (NYSDOH), is proposing a remedy for the above referenced site. The disposal of contaminants at the site has resulted in threats to public health and the environment that would be addressed by the remedy in this Decision Document (DD). The disposal or release of contaminants at this site, as more fully described in Section 6 of this document, has contaminated various environmental media. Contaminants include hazardous waste and/or petroleum.

The Department has issued this document in accordance with the requirements of New York State Environmental Conservation Law and Title 6 of the Official Compilation of Codes, Rules and Regulations of the State of New York; (6 NYCRR) Part 375.

SECTION 2: SITE DESCRIPTION AND HISTORY

Location: The United Cleaners site is a dry cleaning business located in the Town of Henrietta, Monroe County. The site is approximately 0.3 miles northwest from the intersection of West Henrietta Rd and Calkins Rd. The site location is shown in the attached Figure 1.

Site Features: The dry cleaning operations are located at the center of a commercial building in Suburban Plaza, consisting of a 14.6 acre parcel containing a variety of business establishments (Tax Parcel ID 162.18-2-1.111). The site is defined in the consent order as the boundaries of the commercial structure containing the United Cleaners operations and the site property between this building and the western property boundary. United Cleaners is located at the center of the north-south oriented building. The United Cleaners space is approximately 75 by 30 ft. Residential properties are within 200 ft west of the dry cleaner. Also bordering the property is a combination of residential and commercial property to the north, residential property across West Henrietta Rd to the east, and by commercial property to the south.

Current use/Zoning: The site is currently zoned for commercial use. Two commercial structures are on the property.

Historic Use: The Suburban Plaza property was developed in approximately 1959. It is reported that dry cleaning has been performed at this site since 1993. Site contamination is related to the

dry cleaning operations. The operations converted their dry cleaning process from chlorinated solvents to petroleum distillates.

Site Geology/Hydrogeology: The site soils was determined to consist of silts-clays with variable amounts of sand and gravel to approximately 50 feet below ground which was the extent of the soil borings installed during the site investigations. Bedrock was not encountered during the investigation. The depth to groundwater was determined to vary between 2 to 10 feet below ground surface in shallow wells and 25 to 30 feet below ground surface in the deeper wells. Due to the nature of the soils, silty clays at 6 to 10 feet below ground surface, there appears to be confinement of contaminated groundwater to a shallower zone and the limiting of downward movement of contaminants.

SECTION 3: LAND USE AND PHYSICAL SETTING

The Department may consider the current, intended, and reasonably anticipated future land use of the site and its surroundings when evaluating a remedy for soil remediation. For this site, the use of the site will be limited to commercial and industrial use as described in Part 375-1.8(g).

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

SECTION 4: SITE CONTAMINATION

4.1: Summary of the Site Characterization

A site characterization (SC) serves as the mechanism for collecting data to:

- determine whether a site poses a significant threat to public health and the environment and whether the threat requires further investigation; and
- gather the information necessary to characterize whether site-related contamination requires further action pursuant to one of the DER remedial programs

The SC is intended to identify the nature (or type) of contamination which may be present at a site. The SC reports on data gathered to determine if the soil, groundwater, soil vapor, indoor air, surface water or sediments may have been contaminated. Monitoring wells are installed to assess groundwater and soil borings or test pits are installed to sample soil and/or waste(s) identified.

The analytical data collected on this site includes data for: Air, Groundwater, Soil, Soil Vapor, and Indoor Air.

4.1.1: Standards, Criteria, and Guidance (SCGs)

The remedy must conform to promulgated standards and criteria that are directly applicable or that are relevant and appropriate. The selection of a remedy must also take into consideration

guidance, as appropriate. Standards, Criteria and Guidance are hereafter called SCGs.

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

4.1.2: SC Results

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

TETRACHLOROETHYLENE (PCE)
DICHLOROETHYLENE
TRICHLOROETHENE (TCE)
ACETONE
VINYL CHLORIDE
CHLOROFORM
CHLOROETHANE

The contaminant(s) of concern exceed the applicable SCGs for: Groundwater, Soil, Soil Vapor

4.2: Interim Remedial Measures

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

Soil Excavation/Soil Vapor Mitigation IRM:
Two IRMs were completed at the site which included the excavation of 75 cubic yards of volatile organic compound contaminated soil and the installation of the sub-slab depressurization (SSD) system throughout the commercial building where United Cleaners is located.

Soil Excavation IRM:
Approximately 75 cubic yards of contaminated soils were excavated in June 2009 from the area surrounding the highest identified soil contamination (soil borings B-17 and 19). The initial excavation included 27 cubic yards of soil. Confirmatory sampling found chlorinated solvent contamination above the 6NYCRR Part 375-6.8 protection of groundwater soil cleanup objectives (SCOs). An additional excavation of 48 cubic yards was performed to remove additional soils above the protection of groundwater SCOs. Confirmatory sampling showed that remaining soil contamination at three sample locations (north wall, west wall, and bottom) continued to exceed the protection of groundwater SCOs. No further excavation was performed due to the location of utilities. The contaminants identified above the SCO following the second soil removal included acetone, cis-DCE, trans-DCE, and vinyl chloride. Cis-DCE was above the SCO (0.25 ppm) in three samples at 0.26, 1, and 3 ppm. Trans-DCE was above the SCO (0.19 ppm) in two samples at 0.28 and 0.38 ppm. Acetone was above the SCO (0.05 ppm) in one

sample at 0.581 ppm. Vinyl chloride was above the SCO (0.02 ppm) in one sample at 0.057 ppm. Groundwater samples collected from monitoring well MW-18R, which was installed following the IRM and located within the former excavation area, detected concentrations of cis-DCE and trans-DCE at 15.2 and 18.4 ppb, respectively. MW-18R replaced a monitoring well at the same location that was removed during the course of the IRM. The concentration of cis-DCE and trans-DCE from groundwater samples collected from this location prior to the IRM were 420 and 88 ppb, respectively.

Soil Vapor Mitigation IRM:

Based on the identified presence of CVOCs in soil and groundwater beneath the United Cleaners operations the responsible party chose to install a sub-slab depressurization system to address the potential for CVOCs to impact indoor air. The SSD system was initially installed within the United Cleaners space and the adjacent space to the north in February 2009. In March 2009 United Cleaners discontinued the use of the PCE in their dry cleaning operations. Based on additional sub-slab and indoor air sampling within additional spaces of the commercial building the SSD system was extended to the entire commercial space by November 2009. The SSD system consists of 10 fans with 2 to 4 suction points connected to each fan. Following installation of the SSD system, communication testing indicated sufficient vacuum in the sub-slab. Post-installation sampling of indoor air continued to show detectable levels of TCE (1 - 7 ug/m^3)in indoor air. As a result of these continued detections the air handling system of the building was adjusted to increase the fresh air flow as an additional measure. The SSD system is shown in the attached Figure 3.

4.3: Summary of Environmental Assessment

Nature and Extent of Contamination:

Based upon the investigation conducted to date the primary contaminants of concern at the site include perchloroethylene, trichloroethylene, cis-1,2-dichloroethylene, trans-1,2 dichloroethylene, acetone, and vinyl chloride. These contaminants have been found in shallow soils and groundwater primarily at two locations,, underneath the dry cleaning operations and in an area to the west of the site. Soil and groundwater underneath the dry cleaning machine was identified as a source of contamination due to historic losses of dry cleaning solvent from operations. The soil and groundwater contamination identified 100 +/- feet west of the dry cleaner operations at the edge of the pavement/drainage ditch is suspected as the source of contamination due to the spill or disposal of dry cleaning wastewater. Soil and groundwater sampling locations are shown in the attached Figure 2.

Soils

The highest levels of contaminants were identified in soil located in borings B-17 and B-19, 100 +/- feet west of the dry cleaner at the edge of the pavement/drainage ditch. Concentrations of acetone, PCE, TCE, vinyl chloride and cis-1,2-DCE exceed the 6NYCRR Part 375-6.8(a) unrestricted use and protection of groundwater soil cleanup objectives (SCOs) but not the residential SCOs. The highest concentrations were of PCE at 2.21 and 1.7 ppm in B-17 and B-19, respectively. Acetone exceeded the protection of groundwater and unrestricted SCOs in borings B3, B12, B13, B14, and B15 (0-4 ft bgs) but were below the residential SCOs. These

borings are located in the vicinity of the dry cleaning operations. Acetone was also detected in this range in soil boring HA-107 (100 ft to the NW). Vinyl chloride was detected in this range in soil boring B3. These concentrations were primarily found in the soil samples collected from 0-4 feet below ground surface. Soil contamination was not detected above the unrestricted or protection of groundwater SCOs in soil borings installed between the dry cleaning operations and soil borings B-17 and B-19.

Groundwater-
Sixteen groundwater monitoring wells were installed with the highest concentrations of contaminants identified in a monitoring well located at the center of drainage ditch on the western property line. This well was located down gradient of the soil borings B-17 and B-19 described in the previous section. The primary contaminants detected were cis-DCE (758 ppb), TCE (426 ppb), and PCE (349 ppb). The groundwater standard for each of these compounds is 5 ppb.

Higher levels of contamination were identified in shallow wells (screened less than 20 ft bgs). Deeper wells, screened 30-45 ft bgs, did not show significant levels of contamination with only a single detection of cis-DCE slightly above the 5 ppb groundwater standard.

The primary site contaminants were also identified above groundwater standards in the monitoring wells under and adjacent to the dry cleaning operations at concentrations of cis-DCE ranging from 7 to 191 ppb.

Cis-DCE was detected in the area of the Interim Remedial Measure (IRM) soil excavation at concentrations ranging from 420 ppb prior to the IRM to 15 ppb following the IRM. Contaminants were also identified in a monitoring well in the public area of a residential subdivision to the west at concentrations of 131 - 210 ppb of cis-DCE. These detections led to the investigation of two adjacent residential properties for soil vapor intrusion concerns. Based on the results of this sampling, two additional monitoring wells were installed further west into the residential neighborhood. Groundwater samples from these wells did not identify site-related contamination.

Contaminant groundwater concentrations were elevated at two locations; under the dry cleaning operations and adjacent to soil borings B-17 and B-19. Groundwater concentrations decreased in wells further away from these two suspected source locations other than down gradient of soil borings B-17 and B-19 (IRM soil removal location).

Based on these results there appear to be two distinct source areas, the dry cleaning operations and a disposal/spill location to the west at the edge of the pavement area.

On-Site Soil Vapor Intrusion-
Soil vapor intrusion concerns for the commercial building containing the United Cleaners operations were addressed by the IRM described in Section 4.2.

Off-Site Soil Vapor Intrusion and Sump Water Sampling-
Based on the results of groundwater sampling two adjacent homes were evaluated for soil vapor intrusion impacts. During 2009 and 2010 samples of indoor air, sub-slab vapor, and sump water

were collected from these properties on two occasions. Sump samples from one property contained concentrations of cis-DCE that exceeded the groundwater standard and ranged from 7 - 15 ppb. Cis-DCE was detected in the sump from the other property below the groundwater standard. Chloroform was detected above the groundwater standard in one sump water sample at 99 ppb. Sub-slab vapor and indoor air samples detected TCE in one sample at 0.26 ug/m^3. The results of sampling did not require further action based on NYSDOH guidance.

4.4: Summary of Human Exposure Pathways

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

People are not drinking the contaminated groundwater because the area is served by a public water supply that is not affected by site-related contamination. Direct contact with residual contaminants in soil is not expected because the majority of the site is covered with either the commercial building or pavement. Volatile organic compounds in the groundwater may move into the soil vapor (air spaces within the soil), which in turn may move into overlying buildings and affect the indoor air quality. This process, which is similar to the movement of radon gas from the subsurface into the indoor air of buildings, is referred to as soil vapor intrusion. A sub-slab depressurization system (system that ventilates/removes the air beneath the building) has been installed in the on-site commercial building to prevent the indoor air quality from being affected by the contamination of soil vapor beneath the building. Environmental sampling did not indicate soil vapor intrusion was a concern for off-site buildings.

4.5: Summary of the Remediation Objectives

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

Groundwater

RAOs for Public Health Protection

- Prevent ingestion of groundwater with contaminant levels exceeding drinking water standards.
- Prevent contact with, or inhalation of volatiles, from contaminated groundwater.

RAOs for Environmental Protection

- Restore ground water aquifer to pre-disposal/pre-release conditions, to the extent practicable.
- Prevent the discharge of contaminants to surface water.
- Remove the source of ground or surface water contamination.

Soil

RAOs for Public Health Protection

- Prevent ingestion/direct contact with contaminated soil.
- Prevent inhalation of or exposure from contaminants volatilizing from contaminants in soil.

RAOs for Environmental Protection

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

Soil Vapor

RAOs for Public Health Protection

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

SECTION 5: ELEMENTS OF THE REMEDY

The remedy is a no further action remedy.

The elements of the remedy are as follows:

Based on the results of the investigations at the site, the IRM that has been performed, and the evaluation presented here, the Department is proposing No Further Action and the implementation of Institutional Controls/Engineering Controls as the remedy for the site. The Department believes that this remedy is protective of human health and the environment and satisfies the remediation objectives described in Section 4.5.

Engineering Controls

1. Inspection and maintenance of the existing sub-slab depressurization system.
2. Continued monitoring of the existing groundwater monitoring wells.

Institutional Controls

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

f. any installed soil vapor mitigation systems on this property shall be inspected, certified, operated, and maintained as required in the SMP;

2. Site Management Plan

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

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

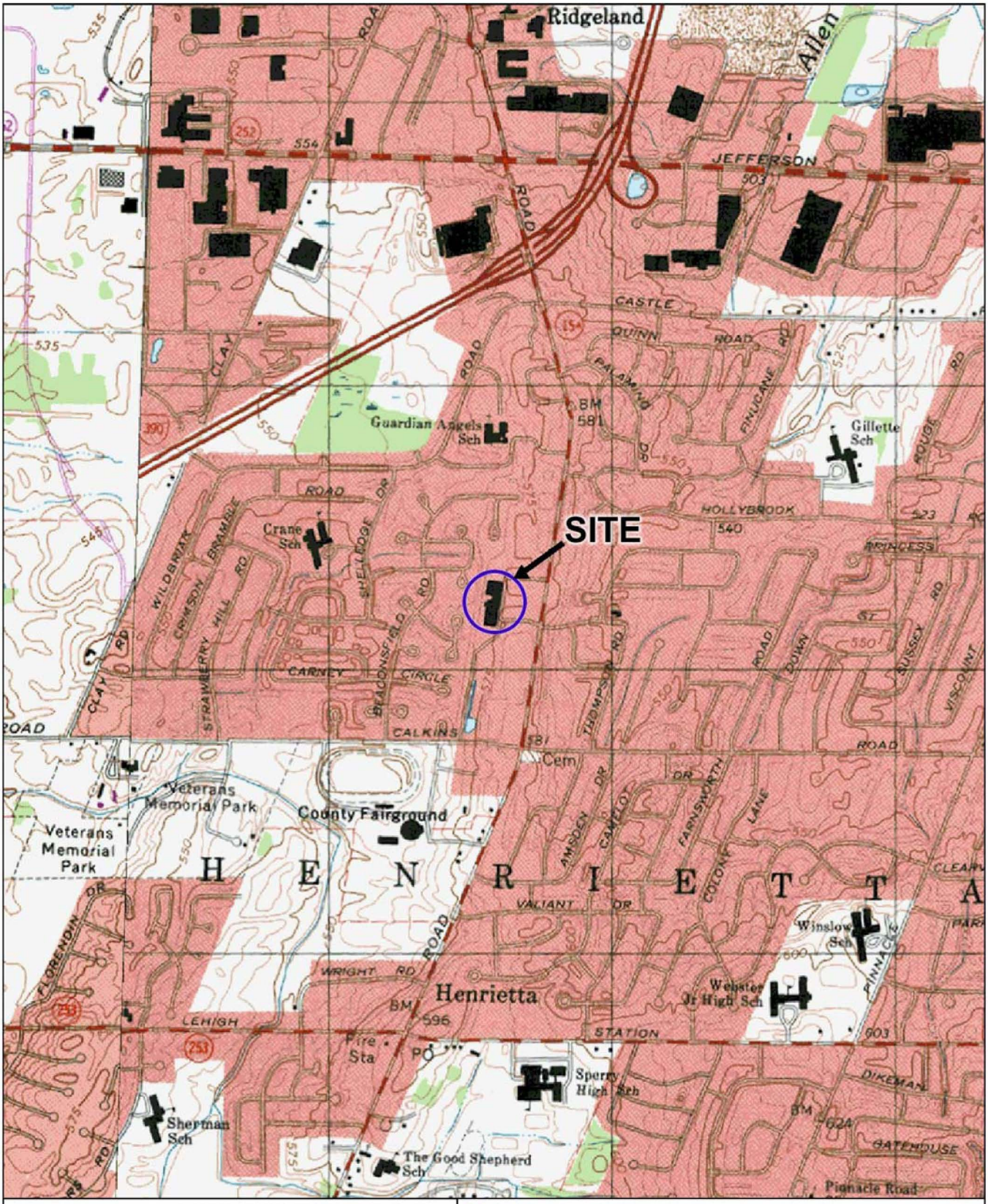
Institutional Controls: Environmental Easement

Engineering Controls: Monitoring of groundwater and the sub-slab depressurization system.

This plan includes, but may not be limited to:

- an Excavation Plan which details the provisions for management of future excavations in areas of remaining contamination;
- descriptions of the provisions of the environmental easement including any land use and groundwater use restrictions;
- provisions for the management and inspection of the identified engineering controls;
- the steps necessary for the periodic reviews and certification of the institutional and/or engineering controls;
- a provision for evaluation of the potential for soil vapor intrusion for any new buildings developed on the site, including provision for implementing actions recommended to address exposures related to soil vapor intrusion;
- a Monitoring Plan to assess the performance and effectiveness of the remedy. The plan includes, but may not be limited to:
  a. monitoring of groundwater to assess the performance and effectiveness of the remedy; and
  b. monitoring of the installed sub-slab depressurization system and indoor air to assess the performance and effectiveness of the remedy.
- a schedule of monitoring and frequency of submittals to the Department.

b. an Operation and Maintenance (O&M) Plan to ensure continued operation, maintenance, monitoring, inspection, and reporting of any mechanical or physical components of the remedy. The plan includes, but is not limited to:
   - compliance monitoring of treatment systems to ensure proper O&M.
   - providing the Department access to the site and O&M records.



SITE COORDINATES: 43°4'23"N 77°36'33"W

N
W
E
S

U.S.G.S. QUADRANGLE: PITTSFORD, NY

HALEY & ALDRICH

UNITED CLEANERS
2199 EAST HENRIETTA ROAD
HENRIETTA, NEW YORK

PROJECT LOCUS

SCALE: 1:24,000
NOVEMBER 2010

FIGURE 1

33587-004/CAD/Figure 1 - Project Locus 1.PDF

LEGEND:

TAX MAP PROPERTY (APPROXIMATE)

SITE BOUNDARY

PLAZA BUILDING

2-INCH MONITORING WELL LOCATIONS — HA-106, MW#15

1-INCH MONITORING WELL LOCATIONS — MW-14

RESIDENTIAL PROPERTY ADDRESS — 18

RESIDENTIAL LOCATIONS WHERE INDOOR AIR, OUTDOOR AIR, SUB-SLAB VAPOR, AND SUMP SAMPLING WAS CONDUCTED

W
S
N
m

0 80 160

SCALE IN FEET

HALEY & ALDRICH

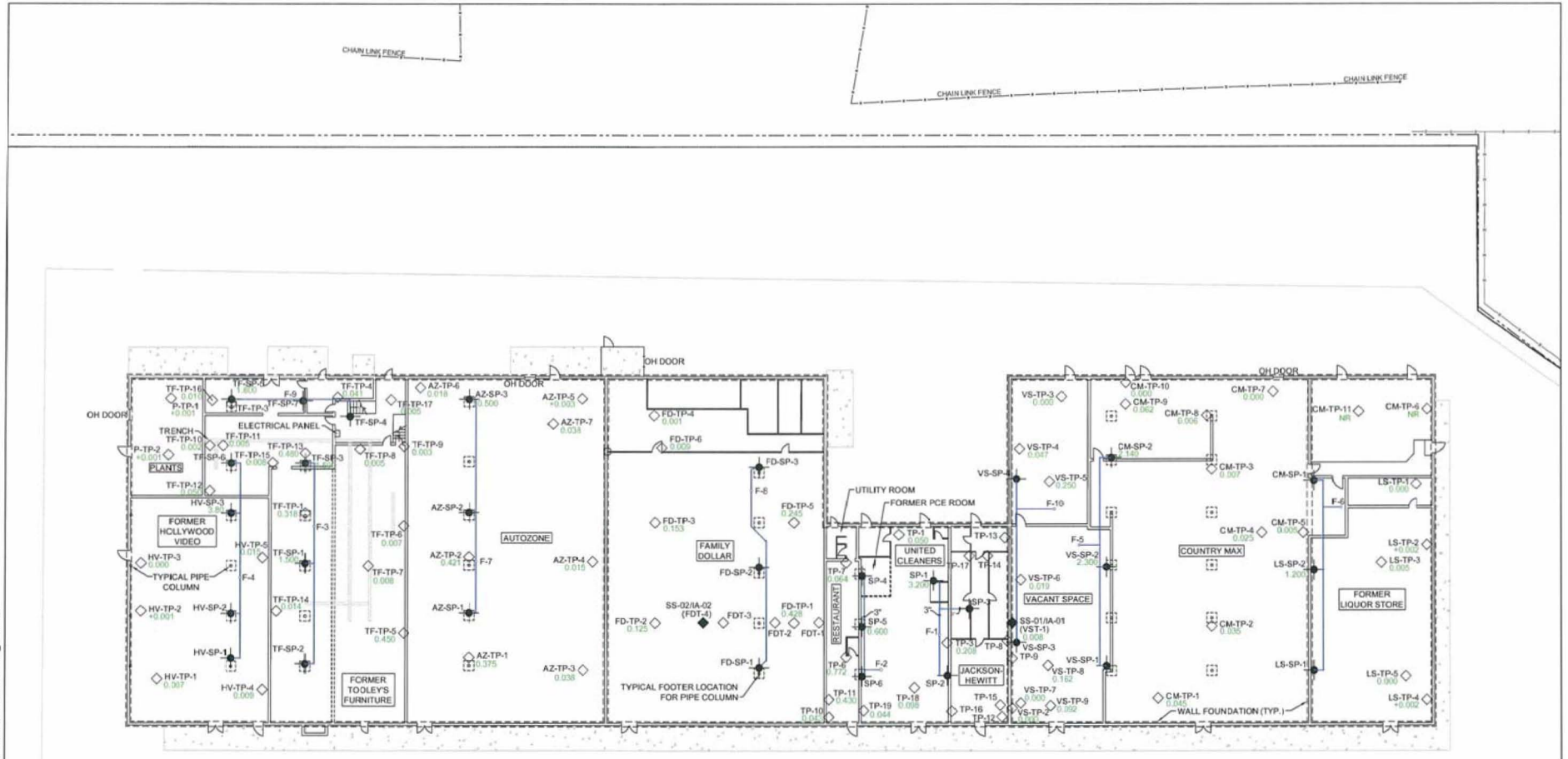
UNITED CLEANERS
2199 EAST HENRIETTA ROAD
HENRIETTA, NEW YORK

SITE PLAN

SCALE: AS SHOWN
NOVEMBER 2010

FIGURE 2

G:\PROJECTS\33587_SUBURBAN PLAZA\001 (INVESTIGATION PHASE)\CAD\2009 FIGURES\FA MW SITE PLAN_HA_APRIL2010_TRB.DWG



LEGEND:

- CONCRETE
- SUB-SLAB DEPRESSURIZATION SYSTEM PIPING
- F-1 FAN LOCATION
- TEMPORARY TEST POINT LOCATION (TP)
- SUCTION POINT LOCATION (SP)
- SUB-SLAB/INDOOR AIR SAMPLE LOCATION
- 0.009 VACUUM TEST RESULTS (IN.W.C.) (SAMPLED 24 NOVEMBER 2009)
- NR NO VACUUM READING TAKEN

VS: VACANT SPACE (FORMER PLAY-IT-AGAIN SPORTS
HV: FORMER HOLLYWOOD VIDEO
TF: FORMER TOOLEY'S FURNITURE
AZ: AUTOZONE
FD: FAMILY DOLLAR
CM: COUNTRY MAX
LS: FORMER LIQUOR STORE
P: PLANTS SPACE

NOTES:
1. FOUNDATIONS DETERMINED FROM HISTORICAL DRAWINGS.
2. ALL LOCATIONS APPROXIMATE.
3. VACUUM READINGS TAKEN ON 11 NOVEMBER 2009.

STATE OF NEW YORK · MARK N. RAMSDELL · 71627 · LICENSED PROFESSIONAL ENGINEER

W N S E

0 20 40 60 80
SCALE IN FEET

HALEY & ALDRICH
SUBURBAN PLAZA
2199 EAST HENRIETA ROAD
HENRIETTA, NEW YORK

SUB-SLAB DEPRESSURIZATION SYSTEM IRM RECORD DRAWING

SCALE: AS SHOWN
NOVEMBER 2010

FIGURE 3

G:\33587 - SUBURBAN PLAZA - ROCHESTER NY\0004\CAD\DRAWINGS\33587-004-FIGURE_3&4.DWG