Community Air Monitoring Plan
Admiral Cleaners Site (401075)
Watervliet, New York

Prepared for

New York State Department of Environmental Conservation
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LIST OF ACROYMNS AND ABBREVIATIONS

$\mu g/m^3$	Microgram(s) per cubic meter
ACM	Asbestos Containing Materials
CAMP	Community Air Monitoring Plan
Chazen	Chazen Companies
CVOC	Chlorinated volatile organic compound
DNAPL	Dense Non-Aqueous Phase Liquid
EA	EA Engineering, P.C. and Its Affiliate EA Science and Technology
ft	Feet (foot)
IDW	Investigation-derived waste
IRM	Interim Remedial Measure
No.	Number
NYSDEC	New York Department of Environmental Conservation
PEL	Permissible exposure limit
PCE	Tetrachloroethene
PM-10	10 micrometers in size
ppm	Parts per million
VOC	Volatile organic compound

1. INTRODUCTION

The New York State Department of Environmental Conservation (NYSDEC) tasked EA Engineering, P.C. and its affiliate EA Science and Technology (EA) to perform Interim Remedial Measure (IRM) management activities at the Admiral Cleaners Site under Work Assignment Number (No.) D007624-38. IRM activities will include building demolition, drilling, and an excavation in two phases at 617 19th Street in Watervliet, Albany County, New York.

This Community Air Monitoring Plan (CAMP) was prepared as a requirement of the Interim Remedial Measure (IRM). Elements of this CAMP were prepared in accordance with the latest version of the NYSDEC Draft Division of Environmental Remediation-10 Technical Guidance for Site Investigation and Remediation (NYSDEC 2010) and in accordance with the New York State Department of Health Generic CAMP. This CAMP is a stand-alone companion document to the health and safety plan (HASP) addendum developed for the site (EA 2018) detailing air monitoring activities to protect the surrounding community.

1.1 SITE DESCRIPTION

The site is a rectangular parcel totaling 0.11 acre located at 617 19th Street, Watervliet, Albany County, New York, between 6th Avenue and 7th Avenue. The parcel has approximately 50 feet (ft) of frontage on 19th Street and a depth of approximately 100 ft. The site consists of a vacant brick and concrete block commercial building with its slab on grade. The building comprises approximately 75 percent of the parcel, and a small grassy area is located behind the building, which is partially enclosed by wooden and chain-link fences. The site is in an urban area with mixed commercial and residential use. The site is bordered by an unoccupied residential building immediately adjacent to the west, a mixed-use building containing a commercial day care and residences to the east across a narrow street, and residences to the north.

1.2 SITE BACKGROUND

The building was constructed in approximately 1950 and was used as a dry-cleaning facility until 2013. During its operation, the facility used tetrachloroethene (PCE) as a cleaning solvent. In 2007, NYSDEC executed a Consent Order, requiring the facility to obtain required owner/manager and operator dry cleaning certifications. Another Consent Order was executed in 2009 due to violations and failure to comply with the 2007 Consent Order (NYSDEC 2009). Dry cleaning operations ceased in 2013 due to continued violations of environmental regulations. In 2013, a Spill Record was opened for improperly stored hazardous waste (e.g., drums containing spent chemicals), which the NYSDEC subsequently removed and the Spill Record was closed. The site was operated as a dry-cleaning drop shop, where garments were brought in and sent to be dry cleaned at another local facility, until 2017. It is currently vacant.

The Chazen Companies (Chazen) performed a limited subsurface investigation at the Site in April 2016 as part of a potential real estate transaction (Chazen 2016). The investigation identified petroleum-related volatile organic compounds (VOCs) and chlorinated VOCs

(CVOCs) in soil, groundwater, and sub-slab soil vapor at the site. The non-chlorinated hydrocarbons may not be gasoline-related, but a result of petroleum-based solvent use (e.g., Stoddard solvent). The NYSDEC was provided the findings and the site was listed in the NYSDEC Registry of Inactive Hazardous Waste Disposal Sites as a Class 2 Site in August 2017 (NYSDEC 2017). EA, under contract to the NYSDEC, is completing a Remedial Investigation of the site. In 2018, field observations identified an underground storage tank (UST) beneath the building slab and petroleum-related impacts to subsurface media, as well as the possible presence of dense non-aqueous phase liquid (DNAPL) related to dry-cleaning solvents in deeper soil. A structural assessment conducted by a civil-structural engineer contracted by the City of Watervliet in February 2019 led the City to recommend the building for demolition as a hazard to public safety due to structural deficiencies.

A multi-phase IRM will address the unsafe building and the UST/potential DNAPL source area. IRM No. 1 will consist of building demolition and off-site disposal of building materials. IRM No. 2 will consist of limited excavation and offsite disposal of the UST, impacted soil adjacent to the UST, and soil where there is the potential for DNAPL. Real-time air monitoring for VOCs and/or particulate levels at the perimeter of the work area will be necessary during building demolition and excavation activities. Additionally, due to the presence of asbestos containing materials (ACM) in the building, asbestos air monitoring will be completed during demolition.

1.3 MONITORING

Monitoring activities will consist of a combination of continuous and periodic monitoring, which will be performed dependent upon the type of activity conducted at the site, as discussed in the following section. VOC monitoring will be performed using a MiniRAE 3000 or equivalent, which is capable of calculating instantaneous concentrations, 15-minute time-weighted averages, and an average of the previous running time period. These levels will be compared to the levels specified in Section 1.4.1.

1.3.1 Continuous Air Monitoring

Continuous monitoring for VOCs and particulates will be required for the building demolition, ground intrusive activities including well installation (e.g., boring installation, construction, development, and completion), excavation (underground storage tank removal and source area excavation), loadout of disposal containers, and management of investigation-derived waste (IDW). Monitoring will take place at the perimeter of the exclusion zone and should include upwind and downwind concentrations at the start of each workday and as-needed thereafter (i.e., wind direction changes, change in work location, modification of exclusion zone, etc.). Weather conditions, including prevailing wind direction, will be observed and recorded for each day of activities.

Particulate concentrations will be monitored continuously at the upwind and downwind perimeters of the work area at temporary particulate monitoring stations. Locations will be dependent on prevailing winds. The particulate monitoring will be performed using a Thermo MIE pDR-1000 DataRam or equivalent. The Thermo MIE pDR-1000 DataRam is real-time

monitoring equipment capable of measuring particulate matter less than 10 micrometers in size (PM-10) and capable of integrating over a period of 15 minutes for comparison to the airborne particulate action level. The Thermo MIE pDR is equipped with an audible alarm to indicate exceedance of the action level. In addition to using the Thermo MIE pDR-1000 DataRam, fugitive dust migration will be visually assessed during all work activities. If particulate concentrations are recorded at higher or equivalent concentrations at the upwind station during investigation activities then continuous air monitoring will be discontinued, as approved by NYSDEC representative.

1.3.2 Periodic Air Monitoring

Periodic monitoring for VOCs will be required during non-intrusive activities. Non-intrusive activities are anticipated to include the potential collection of groundwater and soil samples and IDW management. Periodic monitoring during sample collection will consist of taking a reading as follows– upon arrival at a sample location, opening a well cap, during IDW management, and prior to leaving a sample location.

1.3.3 Third Party Asbestos Monitoring

Per requirements of New York State Industrial Code, Rule 56, a third party will be contracted by the contractor, PES Environmental (PES), to provide continual air monitoring prior to and throughout the asbestos abatement and building demolition and inspect/observe asbestos removal areas and procedures to ensure all applicable regulations are followed. Monitoring performed by the third-party subcontractor will ensure that the work area is safe for re-entry following abatement, and that abatement activities do not create a health hazard in adjacent areas (residential and commercial structures surround the Admiral Cleaner's property). The third-party subcontractor shall notify NYSDEC, EA, and PES immediately should hazardous conditions exist due to elevated air sample results onsite or in adjacent areas and stop work.

1.4 ACTION LEVELS AND RESPONSE

This subsection identifies the action levels and corresponding responses for concentrations of VOCs and particulates detected during the field activities.

1.4.1 Volatile Organic Compounds

CVOCs were identified in soil, groundwater, and sub-slab soil vapor samples including tetrachloroethene, trichloroethene, and *cis*-1,2-dichloroethene. VOC action levels are as follows:

- If ambient air concentrations of total organic vapors at the downwind perimeter of the work area or exclusion zone exceeds 5 parts per million (ppm) above background for the 15-minute average, work activities must be temporarily halted and monitoring continued. If the total organic vapor level readily decreases (per instantaneous readings) below 5 ppm over background conditions (upwind concentrations), work activities will resume with continued monitoring.

- If the total organic vapor levels at the downwind perimeter of the work area or exclusion zone persist in excess of 5 ppm over background but less than 25 ppm, work activities will be stopped, the source of vapors identified, corrective actions taken to abate emissions, and monitoring continued. After these steps, work activities will resume provided that the total organic vapor level 200 ft downwind of the work zone or half the distance to the nearest potential receptor or residential/commercial structure, whichever is less (but in no case less than 20 ft), is below 5 ppm over background for the 15-minute average.

- If the total organic vapor level is above 25 ppm at the perimeter of the work area, work activities will be shut down.

All 15-minute readings will be recorded and be available for NYSDEC and New York State Department of Health personnel to review. Instantaneous readings, if any, used for decision purposes will also be recorded.

1.4.2 Particulates

If the downwind PM-10 particulate level is 100 micrograms per cubic meter ($\mu g/m^3$) greater than background (upwind perimeter) for the 15-minute period or if airborne dust is observed leaving the work area, then dust suppression techniques will be employed. Work will continue with dust suppression techniques provided that downwind PM-10 particulate levels do not exceed 150 $\mu g/m^3$ above the upwind level and provided that no visible dust is migrating from the work area.

If, after implementation of dust suppression techniques, downwind PM-10 particulate levels are greater than 150 $\mu g/m^3$ above the upwind level, work will be stopped, and a re-evaluation of activities initiated. Work will resume provided that dust suppression measures and other controls are successful in reducing the downwind PM-10 particulate concentration to within 150 $\mu g/m^3$ of the upwind level and in preventing visible dust migration.

Similar to the VOC readings, all particulate readings will be recorded and be available for NYSDEC and NYSDOH personnel to review.

2. REFERENCES

The Chazen Companies (Chazen). 2016. *Re: Limited Subsurface Sampling Report, Former Dry Cleaner Property, 617 19th Street, City of Watervliet, Albany County, New York.* April.

EA. 2018. *Health and Safety Plan Addendum*. March

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