Illinois Environmental Protection Agency (Illinois EPA)
Site Remediation Program (SRP) Checklist

LPC No. 0316055033
LP52: 5T4
January 10, 2018 0316

DATABASE SUMMARY

1. **SRP File Heading:**
   0316055033--Cook County
   Chicago/American Drapery Cleaners
   Site Remediation Program/Technical Reports

2. **General Site Information:**
   American Drapery Cleaners
   2235 West Roscoe Street (aka 2235-2239 West Roscoe Street)
   Chicago, Illinois 60618
   Size of the site: 0.13 acre
   PIN(s): 14-19-318-008-0000 & 14-19-318-009-0000

3. **Remedial Applicant:**
   American Drapery Cleaners, Inc.
   Attn: Mr. Richard J. Zell
   c/o Mr. Ariel Weissberg
   401 South LaSalle Street, Suite 403
   Chicago, Illinois 60605
   Phone: (312) 663-0004
   E-mail: Not Provided

4. **Consultant:**
   EPS Environmental Services, Inc.
   Attn: Nicholas Cuzzone
   7237 West Devon Avenue
   Chicago, Illinois 60631
   Phone: (773) 792-3090
   E-mail: NCuzzone@epsenvironmental.com

5. **Property Owner:**
   American Drapery Cleaners and Flame Proofers, Inc.
   Attn: Mr. Richard J. Zell
   2235-2239 West Roscoe Street
   Chicago, Illinois 60618
   Phone: (773) 472-4066
   E-mail: Not Provided

6. **Project Manager:**
   Jeffrey J. Guy
   Phone: (217) 785-8724
   E-mail: Jeff.Guy@illinois.gov

7. **DRM-1:**
   Originally received May 1, 2017 (Log No. 17-64666)
   Updated DRM-1 Form received June 8, 2017 (Log No. 17-64866)

Updated DRM-1 Form received January 8, 2018 (Log No. 18-66217)

8. Right-to-Know: Completed December 12, 2017: Reviewed Not Referred

9. Environmental Justice Area: Yes; form completed September 7, 2017

10. Miscellaneous:

A Leaking Underground Storage Tank (LUST) incident (Incident #952028) was reported for the site in 1995. A No Further Remediation (NFR) letter was issued on February 13, 1998 (by the LUST Section) related to this incident. The main terms of the 1998 NFR letter included: an industrial/commercial land use restriction and use of Chicago groundwater ordinance to restrict potable water usage. However, the laboratory results from the applicable LUST documentation identified no concentrations of contaminants above Tier 1 residential soil remediation objectives. Groundwater was not encountered during the LUST investigation activities.

11. SRP Reporting:

April 19, 2017 *Focused Site Investigation Report/Remediation Objectives Report/Remedial Action Plan* (received May 1, 2017; Log No. 17-64666)

August 1, 2017 *Response Letter* (received August 3, 2017; Log No. 17-65217);

August 1, 2017 *Remedial Action Completion Report* (received August 3, 2017; Log No. 17-65219); and

October 26, 2017 *Response Letter and Tier 3 Evaluation* (received October 31, 2017; Log No. 17-65813)

PROJECT SUMMARY

1. Type of No Further Remediation (NFR) Letter Requested: Focused

- Volatile Organic Compounds (VOCs); and
- Semivolatile Organic Compounds (SVOCs)

2. Land Use: Residential and/or Industrial/Commercial

3. Groundwater Classification: Class II

4. Site Description:

The 0.13-acre site is located within a mixed commercial and residential area in the City of Chicago, Cook County, Illinois on the south side of West Roscoe Street, approximately ½ mile east of the North Branch of the Chicago River and approximately ¾ mile south of Highway 19 (West Irving Park Road). The site is currently vacant and was most recently occupied by American Drapery Cleaners & Flameproofing, Inc. (1966-2016). Historically, the site was occupied by a dye house (drycleaning) as early as 1914. The site is currently developed with three commercial structures. The two interconnected north buildings total approximately 2,350 square feet and were constructed in 1910 and 1923 on separate full basements. The

basement of the 2235 West Roscoe Street building is constructed of sealed limestone block walls & concrete flooring and is equipped with a sealed sump. The basement of the 2239 West Roscoe Street building is constructed with full concrete walls and floors and is also equipped with a sealed sump. The south site building is an approximate 2,244 square foot brick building constructed on a full concrete slab foundation. No sumps are equipped in the south site building.
The site is surrounded as follows:

- North: West Roscoe Street;
- South: Public Alley beyond which are residential properties;
- East: Multi-unit residential properties; and
- West: Residential properties

5. Investigation History:

- Phase I investigation performed in 2000 identified the Recognized Environmental Conditions (RECs) listed below:
- 2016 investigation: ten soil borings (collection/analysis of a total of eleven soil samples), two monitoring wells (collection/analysis of two groundwater samples), and two soil gas sampling probes (collection/analysis of two soil gas samples). The maximum depth explored was 12 to 16 feet below ground surface (bgs).
- 2017 investigation: two soil borings advanced to 13 feet bgs with collection/analysis of two soil samples and collection of one soil gas probe (collection/analysis of one soil gas sample).
- 2017 investigation: magnetometer survey to investigate potential presence of 2,000-gal. heating oil UST; no metallic anomalies were identified. It should be noted, no record of removal of the 2,000-gal. fuel oil tank was identified.

All investigations subsequent to the Phase I investigation were performed to address the RECs identified below.

6. RECs:

There is a potential for releases of petroleum products and/or hazardous materials/waste utilized in historical drycleaning operations to have negatively impacted the site. The site was also identified on the Resource Conservation and Recovery (RCRA) database as a large quantity generator of hazardous waste under the facility name American Drapery Cleaners, 2235 West Roscoe Street. No RCRA violations were listed on the database for this site.

As stated above, a LUST incident (Incident #952028) was reported for the site in 1995, and a NFR letter was issued by the LUST Section in 1998. However, the laboratory results from the applicable LUST documentation identified no concentrations of contaminants above the applicable Tier 1 residential soil remediation objectives. Groundwater was not encountered during the LUST investigation activities. Based on the information provided in the August 1, 2017 *Response Letter* (received August 3, 2017; Log No. 17-65217), three 700-gal. naphtha underground storage tanks (USTs) were removed and three 1,000-gal. naphtha USTs were abandoned-in-place at the site. In addition, one 600-gal. naphtha UST was abandoned in place in June of 2017. All of the USTs are/were located within the south site building.

7. Miscellaneous Information:

Polychlorinated Biphenyls (PCBs): Indicate if above or below 1 mg/kg: **Not Applicable**

Soil Gas Samples Collected: **Yes**
Hazardous Waste: **No**
Free Product/Source Material: **No**
Volatile Chemicals Detected: **Yes**
Are there buildings (as defined for indoor inhalation) on-site: **Yes**

8. **Geology and Hydrogeology:**

Based on soil borings conducted, shallow soil consists of varying depths of gravel fill material underlain by silty clay to the maximum boring depth of 16 feet bgs. The City of Chicago supplies potable water from Lake Michigan to the site and surrounding area. There were no groundwater monitoring or potable wells reported or observed on the site during the site reconnaissance.

Site-specific fraction of organic carbon content (f_{oc}): **0.0134**
Depth to groundwater: **1.59 feet – 2.64 feet bgs**
Hydraulic gradient: **Not determined**
Groundwater flow direction: **Not determined**
Hydraulic conductivity: **4.42 x 10^{-7} cm/sec**
Surface water: **The site is ½ mile east of the North Branch of the Chicago River.**

Water well survey information:
Private potable wells within 1,000 feet or public wells within 2,500 feet of site? **No**
Distance/direction to the closest wells: **Not Applicable**
Site within setback zone of a potable well: **No**
Measured or modeled groundwater contamination within setback zone of a potable well: **No**

9. **Remediation Objectives Summary:**

Land Use: **Residential and/or Industrial/Commercial**
Groundwater Classification: **Class II**
Tier Level: **Tier 1, Tier 2, Tier 3**
Pathway Exclusion: **Yes**
Engineered Barriers: **No**
Institutional Controls: **Yes**

10. **Description of how the Remediation Objectives meet the Tiered Approach to Corrective Action Objectives (TACO) Regulations of 35 Illinois Administrative Code (35 IAC) Part 742:**

Residential Soil Ingestion Exposure Route:
- No Exceedances

Residential Outdoor Soil Inhalation Exposure Route:
- No Exceedances

Construction Worker Soil Ingestion Exposure Route:
- No Exceedances

Construction Worker Soil Inhalation Exposure Route:
- Xylenes detected at one location at 8.7 mg/kg above applicable Tier 1 objective (5.6 mg/kg)

- Tier 2 objective (14.65 mg/kg) developed (Equation S-5); no exceedances of Tier 2 objective.

Soil Component of the Groundwater Ingestion Exposure Route:

- No Exceedances

Groundwater Ingestion Exposure Route:

- No Exceedances

INDOOR INHALATION EXPOSURE ROUTE:

- No exceedances of applicable objectives based on groundwater and soil gas data.
- Indoor air remediation objectives were initially utilized in the northern part of the site because the basement of the 2235 West Roscoe Street building is constructed of limestone block walls (previously unsealed) & concrete flooring and is equipped with a sump (previously unsealed). The basement of the 2239 West Roscoe Street building is constructed with full concrete walls and floors and is also equipped with a sump (previously unsealed). These two interconnected buildings are within the northern portion of the site and separated from the south building (the south site building is constructed on a full concrete slab foundation with no sump(s)).
- Concentrations of volatile compounds exceed the indoor air remediation objectives (J&E1 and J&E2).
- Tier 3 Evaluation consists of: Building Control Technology (BCT) and sealing the limestone walls and sumps as described below.

BCT (2235 West Roscoe Site Building)

To exclude the indoor inhalation exposure route, an approved BCT consisting of a SSD system was installed in accordance with 35 Illinois Administrative Code (35 IAC) Section 742.1210(c)(1). The regulations of 35 IAC 742.1210(c)(1)(A-E) have been satisfied as summarized below and presented in the October 26, 2017 *Response Letter and Tier 3 Evaluation* (received November 9, 2017; Log No. 17-65813):

- ✓ 742.1210(c)(1)(A): The SSD system consists of three sub-slab suction pits (approximately two-cubic feet per location) and greater than six inches below the slab;
- ✓ 742.1210(c)(1)(B): The SSD system includes 3-inch diameter PVC piping properly vented to the exterior, and the required static vacuum & differential pressure have been achieved;
- ✓ 742.1210(c)(1)(C): All visible cracks in the concrete floor were sealed following installation of the SSD system. In addition, the limestone walls in the basement of the 2235 West Roscoe building were sealed with Emocote, a water/vapor proof sealant to prevent the migration of potential vapors within the 2235 West Roscoe building. Furthermore, the sumps in the basements of the 2235 and 2239 North Roscoe Street buildings have been properly sealed.
- ✓ 742.1210(c)(1)(D): The exhaust piping was installed at least 10 feet above the ground and at least 10 feet from doors and windows; and
- ✓ 742.1210(c)(1)(E): Based on the quantitative testing results, no additional suction pits are required to achieve the measurable vacuum beneath the slab in the potentially impacted area on the site.

Tier 3 Evaluation – Indoor Inhalation Exposure Route - 35 IAC Section 742.935(a)

Although groundwater and soil gas data demonstrate that the applicable residential indoor inhalation objectives have been achieved and a BCT has been installed, a Tier 3 evaluation was proposed since the basements walls of one of the on-site buildings are constructed of limestone and the basements of two on-site buildings are equipped with sump systems. The basement walls and sumps have been sealed (further discussed below). The Tier 3 evaluation was approved December 13, 2017 (attached).

In addition to the installation of the SSD system beneath the 2235 West Roscoe building, the limestone walls of the basement (2235 West Roscoe building) have been sealed with waterproof/vapor proof sealant (EMECOLE® Emekote® 100 and EmeSealCrete®) to effectively prevent any potential vapors from migrating into the 2235 West Roscoe site building. Additionally, the sumps in both the 2235 and 2239 West Roscoe buildings have been sealed using Emecole Radon Shield Sealant®. These products were applied according to all manufactures specifications and guidelines (photographic documentation was provided in the October 26, 2017 *Response Letter and Tier 3 Evaluation* (received November 9, 2017; Log No. 17-65813). It should be noted that the sumps are not vented because a SSD system is in place.

The sealing of the limestone walled basement and sumps is a method to reduce the risks associated with potential vapor mitigation within the 2235 and 2239 West Roscoe buildings. The quantitative sub-slab tests to verify the negative pressure field were sufficient in extent to encompass the entire square footage of the applicable area. Based on the results of the quantitative testing, test point readings were within the differential pressure of at least 0.014" Water Column (WC) below the concrete slab, thereby demonstrating the system is in conformance with the generated sub-slab vacuum requirement of 0.003" WC as specified in 35 IAC Section 742.1210(B). Therefore, the current BCT is demonstrated to be effective in mitigating the potential vapor intrusion.

In summary, the indoor inhalation exposure route is addressed as follows:

- The installed BCT consists of a SSD system installed beneath the 2235 West Roscoe site building [35 IAC 742.1210(c)(1)]. This BCT must be property maintained;
- Utilizing an institutional control requiring that sumps in the basements of the 2235 and 2239 North Roscoe Street buildings be properly sealed/maintained to exclude the indoor inhalation exposure route pursuant to 35 IAC 742.935;
- Utilizing an institutional control requiring that the limestone walls in the basement of the 2235 North Roscoe Street building be properly sealed/maintained pursuant to 35 IAC 742.935; and
- With the exception of the area requiring the BCT, restriction of all existing and future buildings to have full concrete slab-on-grade foundations or full concrete basement floors and walls with no sump(s).

NOTE: It has been demonstrated that volatile chemicals associated with the indoor inhalation exposure route have not migrated beyond the remediation site boundary.

11. Remedial Action Performed: No

12. Site-Specific Modeling: No

If R-26 fate and transport modeling performed, has contamination migrated off-site? **Not Applicable**

13. NFR Restrictions:

Indoor Inhalation:

- No building shall be occupied within the "BCT Area" (correlating to footprint of the current 2235 North Roscoe Street building) unless a BCT meeting the requirements of 35 IAC Part 742 Subpart L is operational prior to human occupancy. This BCT must be properly maintained to address the indoor inhalation pathway. If the BCT becomes inoperable, the site owner/operator shall notify building occupants and workers to implement protective measures.

- With the exception of the BCT Area, any existing buildings or any future buildings constructed on the Remediation Site must contain a full concrete slab-on-grade floor or full concrete basement floor and walls with no sump(s).

- The limestone basement walls on the Remediation Site must remain sealed with the approved sealant.

- The sumps on the Remediation Site must remain sealed with the approved sealant. The sump covers must be resealed if removed for sump pump inspection, replacement, maintenance or for any other reason.

- Failure to maintain the BCT, sealed limestone basement walls, or the sealed sumps shall be grounds for voidance of the NFR letter.