November 16, 2022 File No. 25216186.00

Mr. Paul Grittner Remediation and Redevelopment Program Wisconsin Department of Natural Resources 141 NW Barstow St, Room 180 Waukesha, WI 53188

Subject: Site Investigation Work Plan Arctic Laundry & Cleaners (former) 5619 22nd Avenue, Kenosha, Wisconsin BRRTS # 02-30-245843

Dear Mr. Grittner:

SCS Engineers (SCS) has prepared this Site Investigation Work Plan for the former Arctic Laundry and Cleaners in response to your letter dated May 27, 2022. The purpose of the proposed investigation is to further evaluate the extent of chlorinated volatile organic compounds in soil. The information will be used to assess the need for further groundwater assessment to the east, and for the planning of a remedial action focused on limiting the risk of vapor intrusion to the source property building. Additional tasks noted in your letter will be addressed under separate cover.

We are requesting your written response to the Work Plan and are providing a check for payment of the \$700 Work Plan review fee under separate cover. We anticipate conducting the initial site investigation activities detailed in this work plan during the next 45 to 60 days, contingent upon Work Plan approval, access to off-site properties, and driller availability.

If you have any questions regarding this work plan, please contact Robert Langdon at 608-212-3995 or <u>rlangdon@scsengineers.com</u>.

Sincerely,

Jacob Krause, PG Project Hydrogeologist SCS Engineers

JJK/REO_AJR/REL/TK

Robert Langdon Senior Project Manager SCS Engineers

cc: Ms. Vanessa Wishart, Stafford Rosenbaum LLP

Encl. Site Investigation Work Plan

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Site Investigation Work Plan

Arctic Laundry & Cleaners (former) 5619 22nd Avenue Kenosha, Wisconsin

Prepared for:

Roy Baietto 1850 19th Avenue Kenosha, Wisconsin 53140

SCS ENGINEERS

25216186.00 | November 16, 2022

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CERTIFICATIONS

I, Jacob J. Krause, hereby certify that I am a hydrogeologist as the term is defined in s. NR 712.03(1), Wis. Adm. Code, and that, to the best of my knowledge, all of the information contained in this document is correct and the document was prepared in compliance with all applicable requirements in chs. NR 700 to 726, Wis. Adm. Code.

Signature

Project Hydrogeologist Title

November 16, 2022 Date [This page left blank intentionally]

1.0 INTRODUCTION AND BACKGROUND

1.1 PURPOSE

The purpose of this investigation is to further evaluate the extent of chlorinated volatile organic compounds (CVOCs) in soil. The information will be used to evaluate the need for further groundwater assessment and for planning a remedial action focused on limiting the risk of vapor intrusion to the source property building.

1.2 LOCATION AND PROJECT INFORMATION

| 1. | Site Owner: | John C. Ekornaas Revocable Trust |
|-----|------------------------------------|---------------------------------------------------------------------------------------------------------|
| 2. | Responsible Party: | Mr. Roy Baietto (former site owner and operator) |
| 3. | Site Address: | 5619 22 nd Avenue Kenosha, WI |
| 4. | Site Location (Figure 1): | SW¼ of SW¼, Section 31, T.2N, R.23E. Kenosha County |
| 5. | Environmental Consultant: | SCS Engineers 2830 Dairy Drive Madison, WI 53718-6751 Phone: 608-224-2830 Fax: 608-224-2839 |
| 6. | Project Hydrogeologist: | Jacob Krause, PG, SCS Engineers |
| 7. | Project Manager: | Robert Langdon, SCS Engineers |
| 8. | Project Director: | Tom Karwoski, PG, SCS Engineers |
| 9. | BRRTS #: | 02-30-245843 |
| 10. | WDNR Contact: | Paul Grittner Phone: 414-405-0764 |

2.0 SITE BACKGROUND

2.1 SITE HISTORY AND CURRENT STATUS

The property is located along the east side of 22nd Avenue between 56th Street and 57th Street, approximately 6,000 feet west of Lake Michigan (**Figure 1**). The property is improved by a two-story building with a basement, first floor commercial spaces, and second floor residential apartment spaces. The first level and basement of the site building were occupied by a dry-cleaning business until operations ceased in approximately 1996 or 1997.

2.2 PREVIOUS INVESTIGATION SUMMARY

Investigation of CVOCs began in 1994 after a spill of dry-cleaning solvent reached the basement sump. Soil and groundwater sampling revealed CVOCs present within soil and groundwater at concentrations exceeding Ch. NR 720 Residual Contaminant Levels (RCLs) and Ch. NR 140 Enforcement Standards (ESs).

Shortly after the initial phases of site investigation work were completed, the Responsible Party (RP) ceased work on the project, stating financial hardship. After WDNR requested updates on the investigation status, SCS was retained to continue work on the project in 2016.

Since 2016, SCS has completed additional soil and groundwater sampling to delineate the extent of CVOC impacts, as well as sub-slab vapor and indoor air sampling to evaluate risk to occupied spaces of on-site and nearby off-site buildings. A sub-slab depressurization system was also installed within the site building to reduce the potential for CVOC vapor intrusion into the structure.

The most up-to-date investigation results and summary of vapor mitigation were presented in the March 28, 2022, Site investigation Report and April 19, 2022, Site Investigation Report Addendum. WDNR reviewed the Site Investigation Report and Addendum and determined that additional site investigation activities are required to delineate CVOC impacts and to develop appropriate remedial options to address the identified impacts.

3.0 PROPOSED SOIL INVESTIGATION

SCS proposes to advance eight additional soil borings to further evaluate the extent of CVOCs in soil to the north and east of the source property building at 5619 22nd Avenue. Approximate proposed boring locations are shown on **Figure 2**. Actual locations will be determined in the field based on utility locations and general accessibility. Please note that no soil sampling is proposed to the north of the property at 5611 22nd Avenue because the building immediately north of this property at 5605 22nd Avenue has a basement which would likely limit the extent of soil contamination and results from prior vapor intrusion assessment sampling for this building are not indicative of significant contamination under or immediately adjacent to the building.

A summary of the soil sampling scope of work is as follows. Additional sampling details are provided in **Appendix A**.:

- Request access to the off-site properties. Document efforts to obtain access if access is not granted by property owners.
- Contact Digger's Hotline to mark public utilities and a private utility locator for private utilities.
- Using a Geoprobe direct push drill rig, advance each boring to 10 feet below ground surface (bgs).
- Continuously core and describe soil according to the Unified Soil Classification System (USCS), noting stratigraphy and moisture.
- Sample soil headspace in the field at approximate 2 to 2.5-foot intervals using a photo-ionization detector (PID).

- Prepare a soil boring log for each boring.
- Preserve and contain samples in laboratory-supplied containers and transport samples under chain-of-custody to a Wisconsin-certified laboratory for analysis of VOCs by Environmental Protection Agency method 8260b. Collect two to three samples from each boring for laboratory analysis based on indications of CVOC impacts such as odors, staining, or elevated PID readings. One sample will be collected from the 0 to 4-foot direct contact zone of each boring, along with one to two deeper samples between approximately 5 to 10 feet bgs.
- Abandon each borehole in accordance with Ch. NR 141 and complete borehole abandonment forms.
- Contain investigative waste and coordinate appropriate disposal.

4.0 SITE INVESTIGATION REPORT

A report that documents the additional site investigation activities and presents the investigation results will be prepared following an evaluation of the field and laboratory data. The report will include the following:

- Description of sampling activities and laboratory analysis.
- WDNR soil boring logs and abandonment forms.
- Tabulated results of laboratory chemical analysis performed on soil samples.
- A map showing the estimated extent of soil contamination.
- Laboratory analytical report.
- Waste disposal documentation.
- Recommendations for additional investigation or remediation, if necessary.

5.0 SCHEDULE

The schedule for off-site soil sampling is contingent on obtaining access from adjacent property owners. Requests for access to adjacent properties will be completed as soon as possible following submittal of this workplan. It is anticipated that an Addendum to the Site Investigation Report will be submitted to WDNR in early 2023.

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Figures

- 1 Site Location Map
- 2 Site Features Map



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| | | N | | FIGURE | J | 2 | |
|-----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------|--------------------------------------------------|-------------|-----------|---------------|--|
| | | | URES MAP | u | 6751 | 10/0-0 | |
| | | LEGEND | EAT | Ľ | 5 2 7 1 5 | 30 | |
| | | APPROXIMATE PROPERTY LINE (5619 22ND AVENUE) | SITE F | | | 224-28 | |
| | | APPROXIMATE PROPERTY LINE | | 4 | | (808) | |
| | 5619 | PROPERTY ADDRESS NUMBER | | | | NE: (| |
| +++ | +++++++++++++++++++++++++++++++++++++++ | RAILROAD TRACKS | | v J v | | AIRY [PHC | |
| | —— E ——— | ELECTRIC (BURIED) | | | 30 D/ | | |
| | OU | ELECTRIC (OVERHEAD) | | | a C | D V | |
| | G | GAS MAIN | | | | | |
| | SA | SANITARY SEWER | <i>м</i> | | | | |
| | ST | STORM SEWER | NER | EВ | BNIC | ENC | |
| | W | WATER MAIN | LE AI SIN | КР | ٩ſ | /202 | |
| | Ø | UTILITY POLE | | | | 03/17 | |
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| | | SUMP | | | | | |
| | \odot | GEOPROBE BORING | AUN 19 10SH | | | | |
| | • | MONITORING WELL | KEN 56 L | | | | |
| | | SUB-SLAB VAPOR SAMPLE | RCTI | | | | |
| | • | INDOOR AIR SAMPLE [BASEMENT (B), FIRST FLOOR (1), SECOND FLOOR (2)] | AF | | | ۲: | |
| | | OUTDOOR AIR SAMPLE | | BY: | О ВY: | ED B | |
| | | VAPOR MITIGATION SYSTEM PIPING | SITE | AWN | ECKEI | PROV | |
| | × | VAPOR MITIGATION SYSTEM PICK-UP POINT | | DR | 공 | AP | |
| | 0 | VAPOR MITIGATION SYSTEM FAN | | | | | |
| | | PROPOSED SOIL BORING | | §.00 | 016 | 022 | |
| 1. | AERIAL PHOTO | DGRAPH IMPORTED FROM BING MAPS AD 2016 GEOLOCATION MAP TOOL. | | 25216186 | 10/20/2 | 03/01/2 | |
| 2. | UTILITY LOCATIONS ARE APPROXIMATE, BASED ON 22ND AVENUE STORM SEWER AND LIGHTING DRAWING PROVIDED BY THE CITY OF KENOSHA (STATE PROJECT NO. 3994-03-70, SHEET 2.5). | | | | | | |
| 3. | SAMPLE LOCATIONS ARE APPROXIMATE. | | TON, L | | | | |
| | 40 SCAI | 0 40 _E: 1" = 40' | ZT STAFFORD ROSENB. 222 WEST WASHING 33701 | PROJECT NO. | DRAWN: | REVISED: | |

Appendix A

SCS Standard Field Procedures

SCS Engineers (SCS) Standard Geoprobe™ Soil Sampling Procedures

The hydraulic-driven Geoprobe[™] (geoprobe) system can be used to collect discrete soil, groundwater, and soil vapor samples from the subsurface. The system is useful in areas of low overhead clearance since no drill mast is necessary. Soft shallow soil can be drilled and sampled quickly. During drilling, the probe-driven sampler remains sealed as it is pushed or driven to the desired sampling depth. Therefore, only a minimal amount of drill cuttings is produced. A piston stop-pin is removed after the sampler has reached the sampling depth. This allows the piston to retract so that soil enters the sampling tube as it is driven through the soil sampling interval. The soil sample interval is approximately 2 feet long, and the soil sample cores are about 1-inch in diameter.

The geoprobe can be used to collect discrete soil samples for logging, field screening, and soil sample collection. The soil sampling procedures to be used by SCS personnel are similar to those used in soil sampling using split-spoons in augered borings. The geoprobe sampler is operated by a subcontractor. The SCS geologist is responsible for selecting sampling intervals, logging samples after they are collected, placing samples in appropriate containers for laboratory analysis, and documenting sampling procedures.

Soil Sampling Procedures

- Collect geoprobe soil samples continuously using 4-foot intervals, unless another interval is specified in the project Workplan. Borings may be sampled at less than continuous intervals if, in the judgment of the field geologist, site characteristics are sufficiently uniform that continuous sampling is not necessary.
- Examine each soil sample for soil type (Unified Soil Classification System [USCS]), moisture, grain size distribution, color, stratigraphic features, discoloration, or odors.

Headspace Analysis

- Screen soil from all borings in the field for the presence of organic vapors in a headspace established above the sample using a flame-ionization detector (FID) calibrated with methane gas or a photoionization detector (PID) calibrated with isobutylene.
- Analyze headspace by placing a uniform quantity of soil into a polyethylene bag, sealing it tightly, labeling the bag, and measuring organic vapor concentrations in the headspace after the sample has been allowed to equilibrate.

Laboratory Sample Collection

- Send one to two soil samples from each boring to a laboratory for analysis, unless another approach is specified in the project Workplan.
- Place soil samples into sample containers appropriate for the analytical method.
- Place all laboratory sample jars immediately on ice in a cooler and deliver by courier to a laboratory certified by the Wisconsin Department of Natural Resources (WDNR) to analyze the target analyte(s). Analytical methods approved by the WDNR in the "LUST analytical guidance" will be used.

Equipment Decontamination

• Wash all soil sampling tools in an Alconox solution followed by a clean water rinse. Use tap water from a clean supply well or distilled water for the final rinse. Sampling equipment will be air or towel dried between sampling locations.

Documentation

- Record field observations and measurements on field record forms. Record information concerning field activities and conditions directly and legibly in the field logbooks in ink. If an entry must be changed, the change will not obscure the original entry. Document the date, weather conditions, site activities, and personnel on site, including visitors in the logbook.
- Identify soil samples by the sampling location and sample number. For example, soil sample number two from geoprobe boring number three will be designated as GB3S2. Identify field samples with sample labels that list the date, sample collection time, and SCS project number.
- Prepare chain of custody forms that include sample number, sampling procedures, analysis required, the signature of the sampler, type of sample (grab or composite), number of containers, and signature blocks for all who handle the sample (with the exception of shipping personnel).