NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Division of Environmental Remediation, Region 8 6274 East Avon-Lima Road, Avon, NY 14414-9516 P: (585) 226-5353 I F: (585) 226-8139 www.dec.ny.gov

May 9, 2019

Mr. Joseph Lobozzo II Ridgecrest Associates, L.P. 135 Orchard Park Blvd Rochester, NY 14609

Re: 820 Linden Ave Site (#C828200) 820 Linden Ave, Pittsford, NY 14625 Revised Limited Supplemental Remedial Investigation Work Plan; February 21, 2019

Dear Mr. Lobozzo II;

The New York State Departments of Environmental Conservation (NYSDEC) and Health (NYSDOH; collectively referred to as the Departments) have completed their review of the document entitled *"Revised Limited Supplemental Remedial Investigation Work Plan"* (the Work Plan) dated February 21, 2019 and prepared by Stantec for the 820 Linden Ave Brownfield Cleanup Program (BCP) site located in the City of Pittsford, Monroe County. In accordance with 6 NYCRR Part 375-1.6, the Departments have determined that the Work Plan, with the following modifications, substantially addresses the requirements of the Brownfield Cleanup Program:

- Section 4: To be consistent with section 3.9(e) of DER-10, one additional soil sampling location, will be collected from the Septic System #3 (northwest) leach field. The location, identified as LF-4, is shown on the attached modified Figure 2c. The qualified environmental professional will determine if the additional location will be a test pit or soil boring.
- 2. Section 4: The proposed plan for the northwest septic system to remain in place may need to be further evaluated in the Alternatives Analysis report.
- 3. Section 4: One leach field soil sample (from LF-1 to LF-4) and one soil sample adjacent to a septic tank (TANK1-NW or TANK2-NW) will be analyzed for emerging contaminants (1,4-dioxane and the PFAS analyte list) in accordance with the attached guidance.
- 4. Section 4: The Departments will determine if the results of the leach field soil samples are in compliance with the site's SCOs and if the tanks can be abandoned in place during IRM.
- 5. Table 1: Sample LF-4 will be analyzed for the same compounds as LF-1, 2, and 3. Emerging contaminants will be analyzed in accordance with the attached guidance.
- 6. Section 5: In addition to the video survey, dye testing will be completed at the Departments' request to further determine pipe condition, origin and discharge.
- 7. Timeline and Table 3: All tasks are extended to account for the date the Work Plan was



approved. The schedule is enforceable under the Brownfield Cleanup Agreement and is not 'estimated'. Extensions to the approved schedule must be requested in writing and approved by NYSDEC. In addition, the Departments do not commit to the review schedule provided in Table 3. Rather, the Departments will use all best efforts to approve, modify, or reject documents within 45 days of receipt in accordance with 6 NYCRR Part 375-3.6.

8. IRM #2: The Departments understand that septic systems #1 and #2 have not been fully investigated, but the existing data does not indicate the need for remedial action in these areas. The Departments also understand that Stantec plans to remove these septic systems as IRM #2 before collecting additional soil or groundwater data. Based on this information, the Departments support removing systems #1 and #2, but not as an IRM. Rather the Departments request that this work be completed through a Change of Use notice with an Interim Site Management Plan/Excavation Work Plan. Post removal sampling to complete the Remedial Investigation in these areas will be conducted under another Supplemental Remedial Investigation Work Plan. The Change of Use notice and draft Supplemental Remedial Investigation Work Plan will be submitted in accordance with the schedule for submitting Draft IRM WP #2 on Table 3.

With the understanding that the modified Work Plan is agreed to, the Revised Limited Supplemental Remedial Investigation Work Plan is hereby approved. If you choose not to accept these modifications, you are required to notify this office within 20 days after receipt of this letter and prior to the start of field activities. In this event, I suggest a meeting be scheduled to discuss your concerns prior to the end of this 20-day period.

Please notify me at least 7 days in advance of the start of field activities.

By **May 29, 2019** please attach a copy of this letter to the Work Plan and distribute the approved Work Plan as follows:

- Tasha Mumbrue (1 hard copy with an original signature on the certification page);
- Kristin Kulow (NYSDOH Oneonta, electronic file/CD); and
- The document repository at the Pittsford Community Library located at 24 State St. Pittsford, NY 14534 (1 bound hard copy).

If you have questions or concerns, please contact me at (585) 226-5459 or tasha.mumbrue@dec.ny.gov.

Sincerely,

E Todra HManobul

Tasha Mumbrue Geologist Trainee

Attachments:

- 1. Revised Figure 2c
- 2. Emerging Contaminant Guidance

ec:w/attach

Mike Storonsky, Stantec Stephanie Reynolds Smith, Stantec Dwight Harrienger, Stantec Justin Deming, NYSDOH Kristin Kulow, NYSDOH Linda Shaw, Knauf Shaw LLP Dusty Tinsley, NYSDEC Danielle Miles, NYSDEC Bernette Schilling, NYSDEC Frank Sowers, NYSDEC



Sampling for 1,4-Dioxane and Per- and Polyfluoroalkyl Substances (PFAS) Under DEC's Part 375 Remedial Programs

Objective

The Department of Environmental Conservation (DEC) is requiring sampling of all environmental media and subsequent analysis for the emerging contaminants 1,4-Dioxane and PFAS as part of all remedial programs implemented under 6 NYCRR Part 375, as further described in the guidance below.

Sample Planning

The number of samples required for emerging contaminant analyses is to be the same number of samples where "full TAL/TCL sampling" would typically be required in an investigation or remedial action compliance program.

Sampling of all media for ECs is required at all sites coming into or already in an investigative phase of any DER program. In other words, if the sampling outlined in the guidance hasn't already been done or isn't part of an existing work plan to be sampled for in the future, it will be necessary to go back out and perform the sampling prior to approving a SC report or issuing a decision document.

PFAS and 1,4-dioxane shall be incorporated into the investigation of potentially affected media, including soil, groundwater, surface water, and sediment as an addition to the standard "full TAL/TCL sampling." Biota sampling may be necessary based upon the potential for biota to be affected as determined pursuant to a Fish and Wildlife Impact analysis. Soil vapor sampling for PFAS and 1,4-dioxane is not required.

Upon an emerging contaminant being identified as a contaminant of concern (COC) for a site, those compounds must be assessed as part of the remedy selection process in accordance with Part 375 and DER-10 and included as part of the monitoring program upon entering the site management phase.

Soil imported to a site for use in a soil cap, soil cover, or as backfill must be sampled for 1,4-dioxane and PFAS contamination in general conformance with DER-10, section 5.4(e). Assessment of the soil data will be made on a site-specific basis to determine appropriateness for use.

The work plan should explicitly describe analysis and reporting requirements, including laboratory analytical procedures for modified methods discussed below.

Analysis and Reporting

Labs should provide a full category B deliverable, and a DUSR should be prepared by an independent 3rd party data validator. QA/QC samples should be collected as required in DER-10, Section 2.3(c). The electronic data submission should meet the requirements provided at: https://www.dec.ny.gov/chemical/62440.html.

<u>PFAS analysis and reporting:</u> DEC has developed a *PFAS Analyte List* (below) for remedial programs. It is expected that reported results for PFAS will include, at a minimum, all the compounds listed. If lab and/or matrix specific issues are encountered for any compounds, the DEC project manager, in consultation with the DEC remedial program chemist, will make case-by-case decisions as to whether certain analytes may be temporarily or permanently discontinued from analysis at each site.

March 2019



Currently, ELAP does not offer certification for PFAS compounds in matrices other than finished drinking water. However, laboratories analyzing environmental samples (e.g., soil, sediments, and groundwater) are required by DER to hold ELAP certification for PFOA and PFOS in drinking water by EPA Method 537 or ISO 25101. Labs must also adhere to the requirements and criteria set forth in the Laboratory Guidance for Analysis of PFAS in Non-Potable Water and Solids.

Modified EPA Method 537 is the preferred method to use for environmental samples due to its ability to achieve very low detection limits. Reporting limits for PFAS in groundwater and soil are to be 2 ng/L (ppt) and 1 ug/kg (ppb), respectively. If contract labs or work plans submitted by responsible parties indicate that they are not able to achieve these reporting limits for the entire list of 21 PFAS, site-specific decisions will need to be made by the DEC project manager in consultation with the DEC remedial program chemist. Note: Reporting limits for PFOA and PFOS in groundwater should not exceed 2 ng/L.

Additional laboratory methods for analysis of PFAS may be warranted at a site. These methods include Synthetic Precipitation Leaching Procedure (SPLP) by EPA Method 1312 and Total Oxidizable Precursor Assay (TOP Assay).

SPLP is a technique for determining the potential for chemicals in soil to leach to groundwater and may be helpful in determining the need for addressing PFAS-containing soils or other solid material as part of the remedy. SPLP sampling need not be considered if there are no elevated PFAS levels in groundwater. If elevated levels of PFAS are detected in water, and PFAS are also seen in soil, then an SPLP test should be considered to better understand the relationship between the PFAS in the two media.

The TOP Assay can assist in determining the potential PFAS risk at a site. For example, some polyfluoroalkyl substances may transform to form perfluoroalkyl substances, resulting in an increase in perfluoroalkyl substance concentrations as contaminated groundwater moves away from the site. To conceptualize the amount and type of oxidizable perfluoroalkyl substances which could be liberated in the environment, a "TOP Assay" analysis can be performed, which approximates the maximum concentration of perfluoroalkyl substances that could be generated if all polyfluoroalkyl substances were oxidized.

PFAS-containing materials can be made up of per- and polyfluoroalkyl substances that are not analyzable by routine analytical methodology (LC-MS/MS). The TOP assay converts, through oxidation, polyfluoroalkyl substances (precursors) into perfluoroalkyl substances that can be detected by current analytical methodology. Please note that analysis of highly contaminated samples, such as those from an AFFF site, can result in incomplete oxidation of the samples and an underestimation of the total perfluoroalkyl substances. Please consult with a DEC remedial program chemist for assistance interpreting the results.

<u>1,4-Dioxane analysis and reporting</u>: The reporting limit for 1,4-dioxane in groundwater should be no higher than 0.35 μ g/L (ppb) and no higher than 0.1 mg/kg (ppm) in soil. Although ELAP offers certification for both EPA Method 8260 SIM and EPA Method 8270 SIM in waters, DER is advising the use of Method 8270 SIM because it provides a more robust extraction procedure, uses a larger sample volume, and is less vulnerable to interference from chlorinated solvents. The analysis currently performed for SVOCs in soil is adequate for evaluation of 1,4-dioxane in soil, which already has an established SCO.

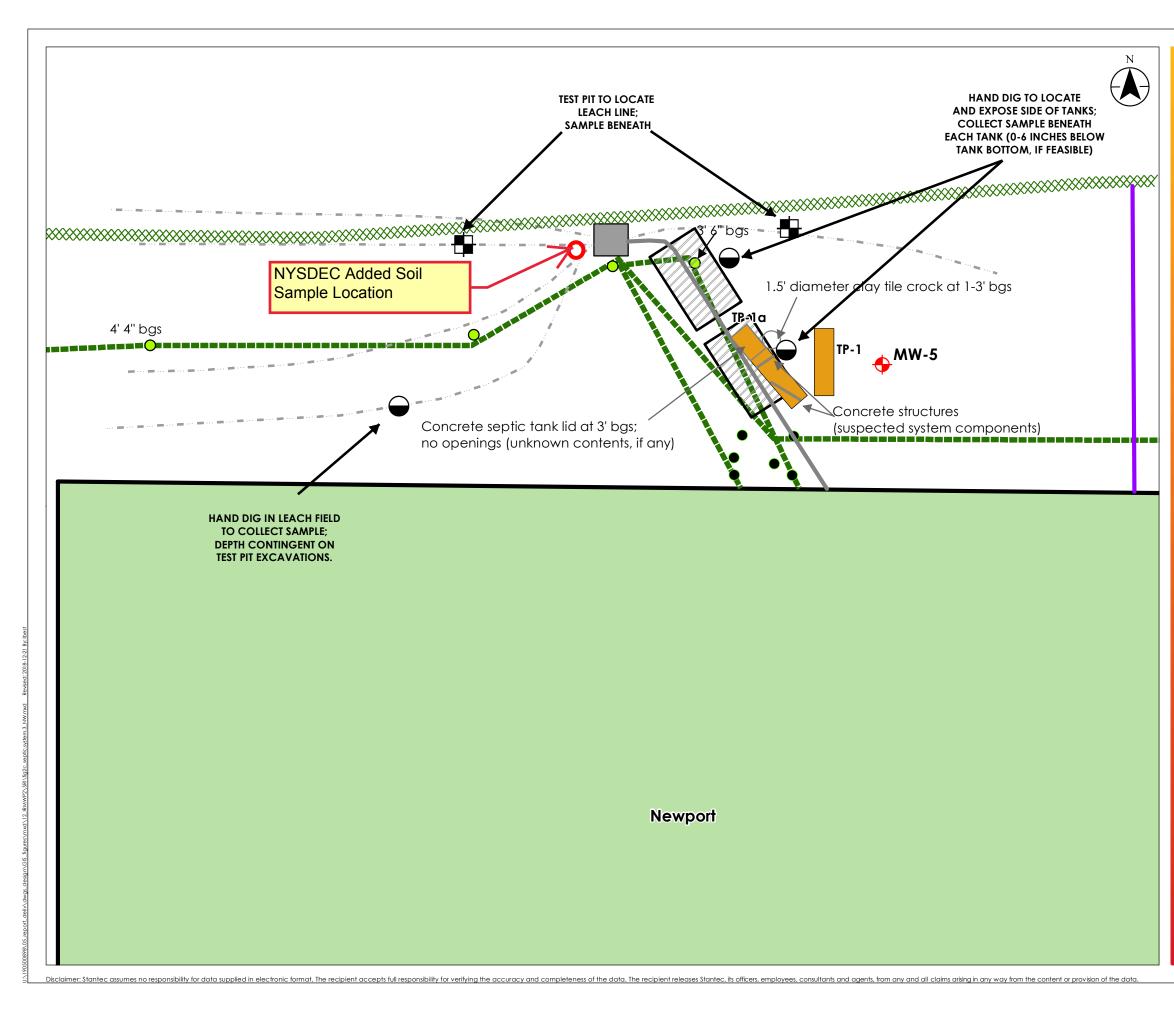


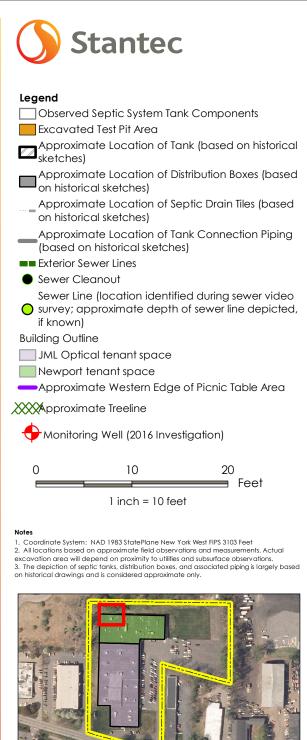
Refinement of sample analyses

As with other contaminants that are analyzed for at a site, the emerging contaminant analyte list may be refined for future sampling events based on investigative findings. Initially, however, sampling using this PFAS Analyte List and 1,4-dioxane is needed to understand the nature of contamination.

Group	Chemical Name	Abbreviation	CAS Number		
	Perfluorobutanesulfonic acid	PFBS	375-73-5		
	Perfluorohexanesulfonic acid	PFHxS	355-46-4		
Perfluoroalkyl sulfonates	Perfluoroheptanesulfonic acid	PFHpS	375-92-8		
Suitrates	Perfluorooctanessulfonic acid	PFOS	1763-23-1		
	Perfluorodecanesulfonic acid	PFDS	335-77-3		
	Perfluorobutanoic acid	PFBA	375-22-4		
	Perfluoropentanoic acid	PFPeA	2706-90-3		
	Perfluorohexanoic acid	PFHxA	307-24-4		
	Perfluoroheptanoic acid	PFHpA	375-85-9		
	Perfluorooctanoic acid	PFOA	335-67-1		
Perfluoroalkyl carboxylates	Perfluorononanoic acid	PFNA	375-95-1		
Garboxylatoo	Perfluorodecanoic acid	PFDA	335-76-2		
	Perfluoroundecanoic acid	PFUA/PFUdA	2058-94-8		
	Perfluorododecanoic acid	PFDoA	307-55-1		
	Perfluorotridecanoic acid	PFTriA/PFTrDA	72629-94-8		
	Perfluorotetradecanoic acid	PFTA/PFTeDA	376-06-7		
Fluorinated Telomer	6:2 Fluorotelomer sulfonate	6:2 FTS	27619-97-2		
Sulfonates	8:2 Fluorotelomer sulfonate	8:2 FTS	39108-34-4		
Perfluorooctane- sulfonamides			754-91-6		
Perfluorooctane-	N-methyl perfluorooctanesulfonamidoacetic acid	N-MeFOSAA	2355-31-9		
sulfonamidoacetic acids	N-ethyl perfluorooctanesulfonamidoacetic acid	N-EtFOSAA	2991-50-6		

PFAS Analyte List





Project Location: 820 Linden Avenue Pittsford, Monroe Co., NY

Prepared by LB on 2018-12-17 Technical Review by SRS/RM on 2018-12-18 Independent Review by MS/KI on 2018-12-20 190500898

Client/Project 820 Linden Ave Site BCP Site #C828200 Limited SRI Work Plan

Figure No. 2c

Title

Septic System #3 (northwest)

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Division of Environmental Remediation, Region 8 6274 East Avon-Lima Road, Avon, NY 14414-9516 P: (585) 226-5353 I F: (585) 226-8139 www.dec.ny.gov

June 7, 2019

Mr. Joseph Lobozzo II Ridgecrest Associates, L.P. 135 Orchard Park Blvd Rochester, NY 14609

Re: 820 Linden Ave Site (#C828200) 820 Linden Ave, Pittsford, NY 14625 Dispute Resolution Notice

Dear Mr. Lobozzo II:

The New York State Department of Environmental Conservation (NYSDEC) received a dispute resolution notice letter dated May 24, 2019 from Ms. Linda Shaw in regard to the NYSDEC approval with modification letter ("comment letter") for the Supplemental Remedial Investigation Work Plan dated May 9, 2019. After further review, NYSDEC agrees to revise comment #8 in the comment letter to state the tank removals may be undertaken as an Interim Remedial Measure (IRM) rather than as previously detailed in the comment letter.

This letter shall serve as documentation to satisfy the dispute resolution notice. Please contact me at (585) 226-5459 if you have any questions or concerns.

Sincerely,

Todra HMarshe

Tasha Mumbrue Geologist Trainee

ec: Mike Storonsky, Stantec Stephanie Reynolds Smith, Stantec Dwight Harrienger, Stantec Linda Shaw, Knauf Shaw LLP Dusty Tinsley, NYSDEC Bernette Schilling, NYSDEC Frank Sowers, NYSDEC Michael Cruden, NYSDEC



Department of Environmental Conservation



Revised Limited Supplemental Remedial Investigation Work Plan

Brownfield Cleanup Program Site #C828200 820 Linden Avenue Pittsford, Monroe County, New York

Prepared for:

New York State Department of Environmental Conservation 6274 Avon-Lima Road Avon, New York 14414

Prepared on behalf of:

Ridgecrest Associates 135 Orchard Park BV Rochester, New York 14609

Prepared by:

Stantec Consulting Services, Inc. 61 Commercial Street, Suite 100 Rochester, New York 14614

February 2019

Stantec

Certification

I, Kevin Ignaszak, of Stantec Consulting Services Inc., certify that I am currently a NYS registered engineer as defined in 6 NYCRR Part 375 and that this *Supplemental Remedial Investigation Work Plan* was prepared in general accordance with applicable statutes and regulations and in substantial conformance with the DER Technical Guidance for Site Investigation and Remediation (DER-10).



FEB 5,2019

Signature

Date



Stantec Consulting Services Inc. 61 Commercial Street Suite 100, Rochester NY 14614-1009

February 21, 2019 File: 190500898

Ms. Danielle Miles, Environmental Engineer New York State Department of Environmental Conservation Division of Environmental Remediation 6274 East Avon-Lima Road Avon, NY 14414

Reference: Revised Limited Supplemental Remedial Investigation Work Plan Brownfield Cleanup Program Site # C828200 820 Linden Avenue Pittsford, Monroe County, New York

Dear Danielle:

On behalf of Ridgecrest Associates, Stantec Consulting Services Inc. (Stantec) is submitting this Revised Work Plan for the Brownfield Cleanup Program at the 820 Linden Ave Site located at 820 Linden Avenue, Pittsford, Monroe County, New York (Site) for your review. This Work Plan summarizes the proposed approach for a limited Supplemental Remedial Investigation (SRI) to aid in the preparation of a second Interim Remedial Measures (IRM2) Work Plan (WP). The IRM2 WP will be addressing the historical septic systems encountered during the Remedial Investigation (RI) test pit program conducted in August 2018. The need for an additional investigation of the septic systems and nearby utility configuration was discussed with NYSDEC on December 6, 2018. Monthly Progress Reports have provided NYSDEC with summaries of the RI tasks performed to date and preliminary field and analytical findings.

OBJECTIVES

The overall objectives of the SRI are as follows:

- 1. Refine our understanding of the utility configuration in the proposed excavation areas;
- 2. Investigate tank contents for anticipated off-site disposal; and
- 3. Evaluate subsurface soil conditions beneath the septic tanks and other system components that are to be closed in-place.

The Monthly Progress Reports provide description of the RI tasks performed to date and resulting findings and are therefore, not repeated herein.

SUMMARY OF SRI TASKS

The proposed SRI tasks are summarized in the following sub-sections. Unless otherwise indicated, the SRI tasks will be performed in general accordance with the RIWP.

1. GROUND PENETRATING RADAR (GPR) SURVEY

A GPR survey will be performed in the three septic system areas to aid in the pipe investigation and plans for future system removal. Figure 1 presents an overview of the septic system locations in relation to Site features. In each of the three septic system locations, a more thorough

Ms. Danielle Miles February 21, 2019 Page 2 of 5

Reference: Limited Supplemental Remedial Investigation BCP Site # C828200 820 Linden Avenue Pittsford, Monroe County, New York

understanding of the locations of active sanitary sewer piping (and possibly other piping) will help to minimize the potential for utility damage or disruption of service to the tenants during the IRM2 implementation. Figures 2a through 2c depict our present understanding of the utilities in each of the septic system locations as well as the system configuration. The depiction of system components is approximate only and is based on historical drawings, supplemented by field observations from the RI test pit program.

2. SANITARY SEWER INVESTIGATION

The sanitary sewer near the southeast (Septic System #1, see Figure 2a) and southwest (Septic System #2, see Figure 2b) septic systems will be exposed through hand excavation to confirm depth and location to aid in the SRI and IRM implementation (system removal).

3. TANK CONTENTS INVESTIGATION

The tank lids in each of the three systems will be exposed to assess and sample tank contents, if present and feasible. This will allow evaluation of the contents to better plan for their management and disposal. The samples collected from the tanks will serve as waste characterization samples only and are not included in the data usability review program.

4. SOIL INVESTIGATION: SEPTIC SYSTEM #3 (NORTHWEST)

During development of the approach to address the encountered septic systems, the complexity and feasibility of removing Septic System #3 (Northwest, see Figure 2c) was evaluated. The current active sanitary sewer configuration appears to overlap with the septic system components. This area is further complicated by the presence of nearby large tree and root systems that would be seriously disrupted during system excavation. Due to these findings, Stantec is recommending that the northwest septic system remain in place. This portion of the SRI would first involve collection of soil samples near each of the tanks and within the leach fields. The analytical results for the soil samples will be evaluated to determine compliance with Site SCOs. If soil results are found to be acceptable, it is proposed that the tanks be abandoned in place during IRM2. Details on the abandonment will be provided to NYSDEC in IRM2 WP.

Proposed sample locations are depicted on Figure 2c. These locations were selected to target potential soil impacts near the septic tanks and in both leach fields. To the extent practicable, samples near the tanks will be collected at a depth within 2 ft. beneath, and within 2 horizontal ft. from the tanks. To the extent practicable, samples near the leach field piping will be collected at a depth within 0.5 ft. beneath, and within 2 horizontal ft. from the piping.

Ms. Danielle Miles February 21, 2019 Page 3 of 5

 Reference:
 Limited Supplemental Remedial Investigation

 BCP Site # C828200
 820 Linden Avenue

 Pittsford, Monroe County, New York

5. PIPE INVESTIGATION: SEPTIC SYSTEM #2 (SOUTHWEST)

The two pipes encountered in this area during the RI test pit program will be investigated to understand the purpose and status of each pipe. This will involve confirmation by the Owner and tenants that there is no knowledge of their use as well as requesting a typical DigSafely NY utility stakeout. A small hole will then be drilled into each of the two pipes to assess the contents if feasible. If access is feasible, the hole will be widened so that a video survey can be performed. The video survey will attempt to assess pipe condition, origin, and discharge location. Following the video survey, the holes in the pipes will be repaired with HDPE sleeves and banded. If the pipe is found to be brittle and is damaged beyond the use of HDPE sleeve and banding repair technique, the damaged section will be cut and removed and replaced with a Fernco coupling. The piping repairs will be documented through field notes and photographs. The video survey will also include a pipe in this area that is likely an active sewer line based on historical drawings and the observed nearby sewer cleanout.

ADDITIONAL PLANS

Additional complementary plans, including a Quality Assurance Project Plan (QAPP), Health and Safety Plan (HASP), and Community Air Monitoring Plan (CAMP) were prepared as appendices to the RIWP. The SRI activities will be performed in accordance with this Work Plan and each of the following complementary plans:

- **QAPP:** Outlines the procedures to be used to assure that analytical results obtained as part of the SRI meet data quality objectives.
- **HASP:** Describes personal safety protection standards and procedures to be followed by Stantec personnel during the SRI field tasks. Contractors will be required to develop their own HASP, as well as to meet pertinent health and safety regulations.
- **CAMP:** Describes procedures for monitoring and controlling air quality issues related to VOCs and particulates (dust) that may arise during remedial excavation activities. This plan will be supplemented with comments provided by the agencies on the RIWP on May 21, 2018.

LABORATORY PROGRAM

Sampling and analytical activities will be conducted in accordance with standard environmental sampling and analytical guidelines and protocols contained in the QAPP as presented in Appendix A of the RIWP. Samples will be submitted to, and all analyses will be performed by, a NYSDOH ELAP-certified laboratory. Analytical reports will be prepared in accordance with the NYSDEC ASP Category B requirements, except for waste characterization samples. All sample data, except waste characterization samples, will be submitted to NYSDEC in the appropriate EQuIS Electronic Data Deliverable (EDD) format pursuant to DER-10.

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Ms. Danielle Miles February 21, 2019 Page 4 of 5

Reference: Limited Supplemental Remedial Investigation BCP Site # C828200 820 Linden Avenue Pittsford, Monroe County, New York

Analytical summary tables will be prepared which summarize the data and compare them to the applicable SCOs. This will include: Track 2 SCOs for Commercial Use and Industrial Use, and the Protection of Groundwater (POGW) SCOs; NYSDEC Commissioner Policy CP-51 Table 1 Supplemental SCOs for Commercial/Industrial Uses and POGW. The analytical tables will also include comparison to Track 1 SCOs for Unrestricted Use for evaluation of residual contamination and potential beneficial re-use if feasible.

A summary of proposed samples to be collected and analyzed as part of this SRI is provided in Table 1. A summary of the proposed quality control samples to be collected and analyzed as part of this SRI is provided in Table 2.

TIMELINE AND NEXT STEPS

We propose that this work scope be implemented as soon as practical, contingent on weather conditions, contractor availability, and the Work Plan approval process. The estimated project schedule is provided in Table 3.

Findings from the SRI will be included in the final RI Report, and will assist in the preparation of IRM2 WP which is expected to address: (1) septic system removal in the southeast and southwest; (2) in-place closure of the northwest septic system (assuming that the soil samples collected near the northwest septic system do not indicate unacceptable soil impacts); and (3) debris pile removal.

CLOSING

We look forward to your comments on this SRI Work Plan. Should you have any questions or require further information to aid in the review and approval process, please contact us.

Sincerely, STANTEC CONSULTING SERVICES INC.

Aquanie Sapold Surth

Stephanie Reynolds Smith Project Manager, Hydrogeologist (585) 413-5272 Stephanie.ReynoldsSmith@stantec.com

~ P. 7

Michael P. Storonsky Managing Principal (585) 413-5266 Mike.Storonsky@stantec.com

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Ms. Danielle Miles February 21, 2019 Page 5 of 5

Reference: Limited Supplemental Remedial Investigation BCP Site # C828200 820 Linden Avenue Pittsford, Monroe County, New York

Rymahory

Robert J. Mahoney, P.G. Senior Environmental Geologist (585) 413-5301 Bob.Mahoney@stantec.com

Jana Best

Laura Best Geologist (585) 413-5327 Laura.Best@stantec.com

K. Kulow (NYSDOH) ec: D. Tinsley (NYSDEC) J. Lobozzo (Ridgecrest) L. Shaw (Knauf Shaw) File

List of Attachments:

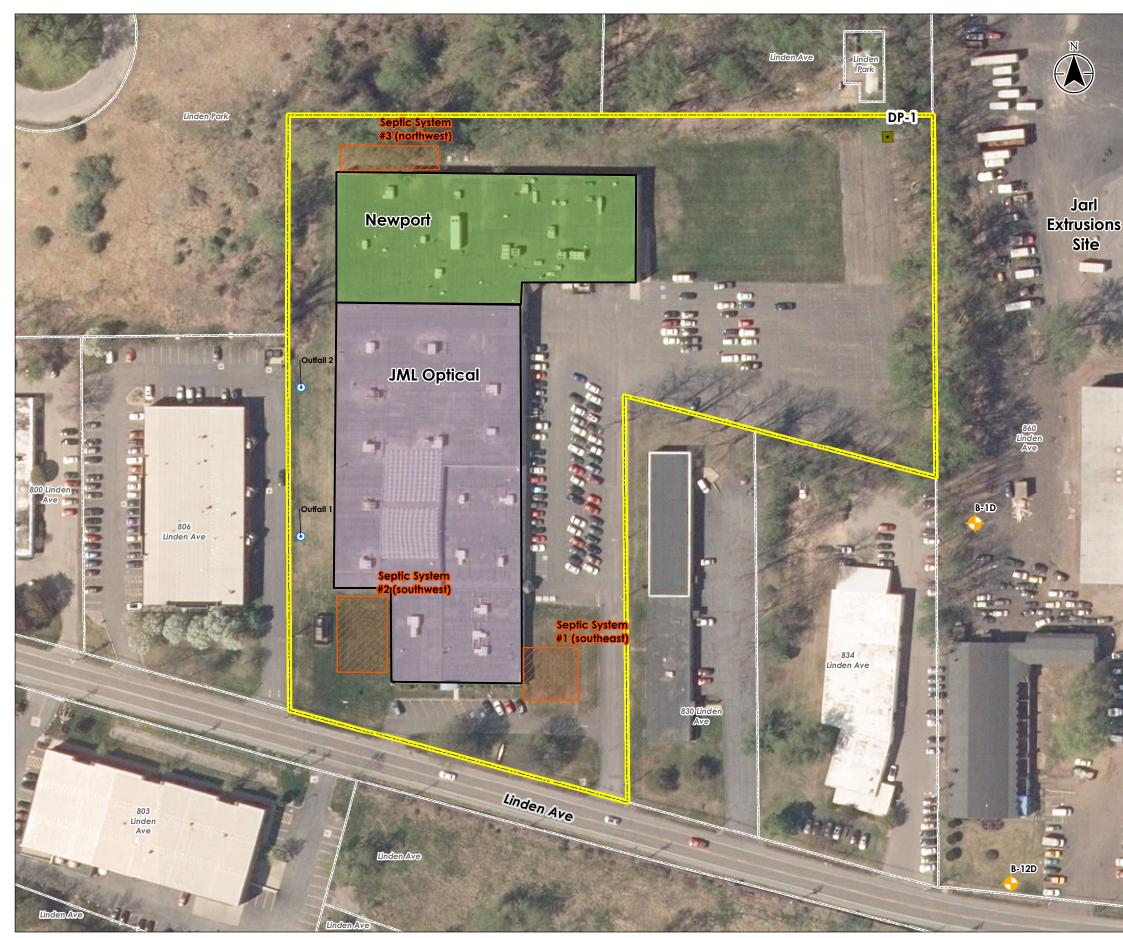
Figure 1	Overview of Septic System Locations
Figure 2a	Septic System #1 (southeast)
Figure 2b	Septic System #2 (southwest)
Figure 2c	Septic System #3 (northwest)
Table 1	Summary of Proposed Samples
Table 2	Summary of Field Quality Control Checks
Table 3	Estimated Project Schedule

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Limited Supplemental Remedial Investigation BCP Site # C828200 820 Linden Avenue Pittsford, Monroe County, New York

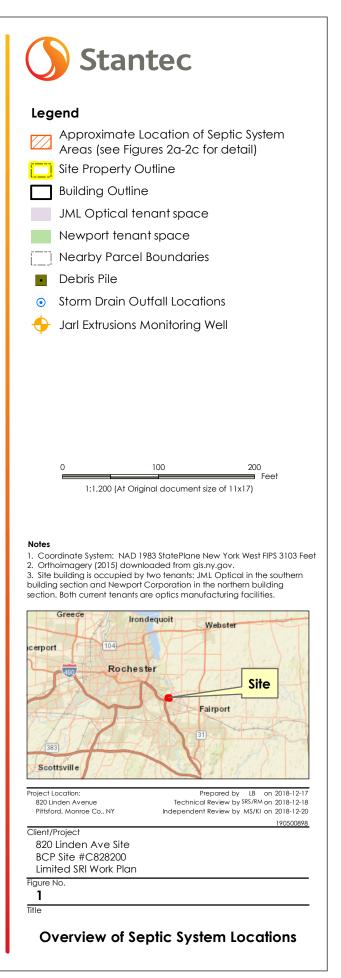
FIGURES

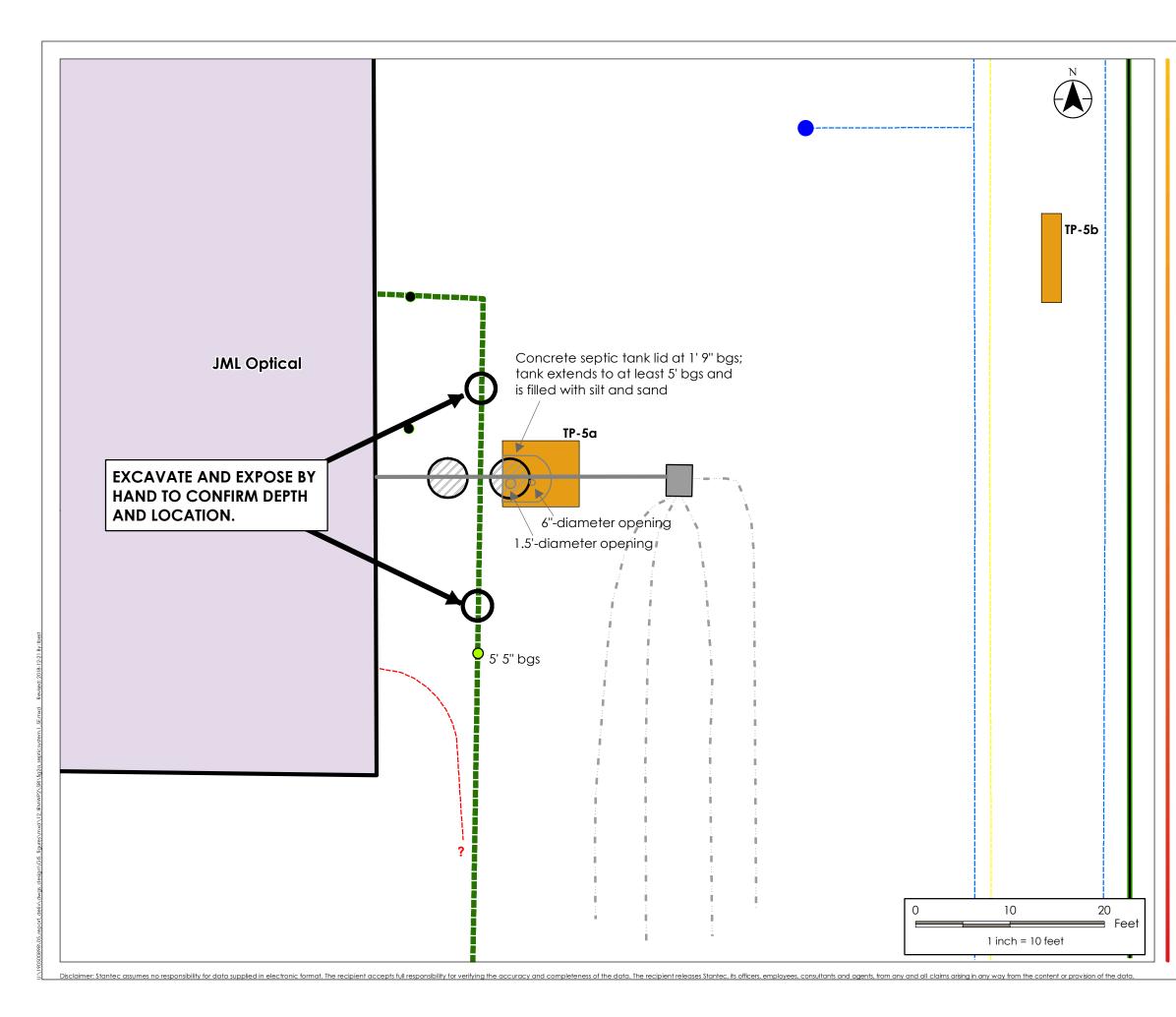
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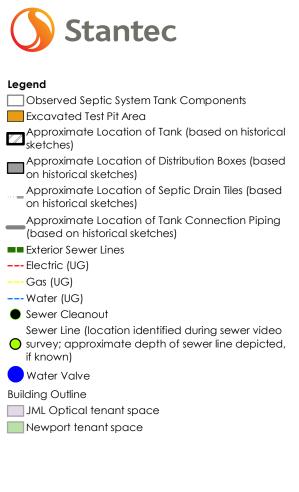


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imer: Stantec assumes no responsibility for data supplied in electronic format. The recipient accepts full responsibility for verifying the accuracy and completeness of the data. The recipient releases Stantec, its officers, employees, consultants and agents, from any and all claims arising in any way from the content or provision of the data.







1. Coordinate System: NAD 1983 StatePlane New York West FIPS 3103 Feet

 Coordinate system: NAD 1785 statement new rate master and statement.
 All locations based on approximate field observations and measurements. Actual excavation area will depend on proximity to utilities and subsurface observations.
 The depiction of septic tanks, distribution boxes, and associated piping is largely based on historical drawings and is considered approximate only.



Project Location 820 Linden Avenue Pittsford, Monroe Co., NY

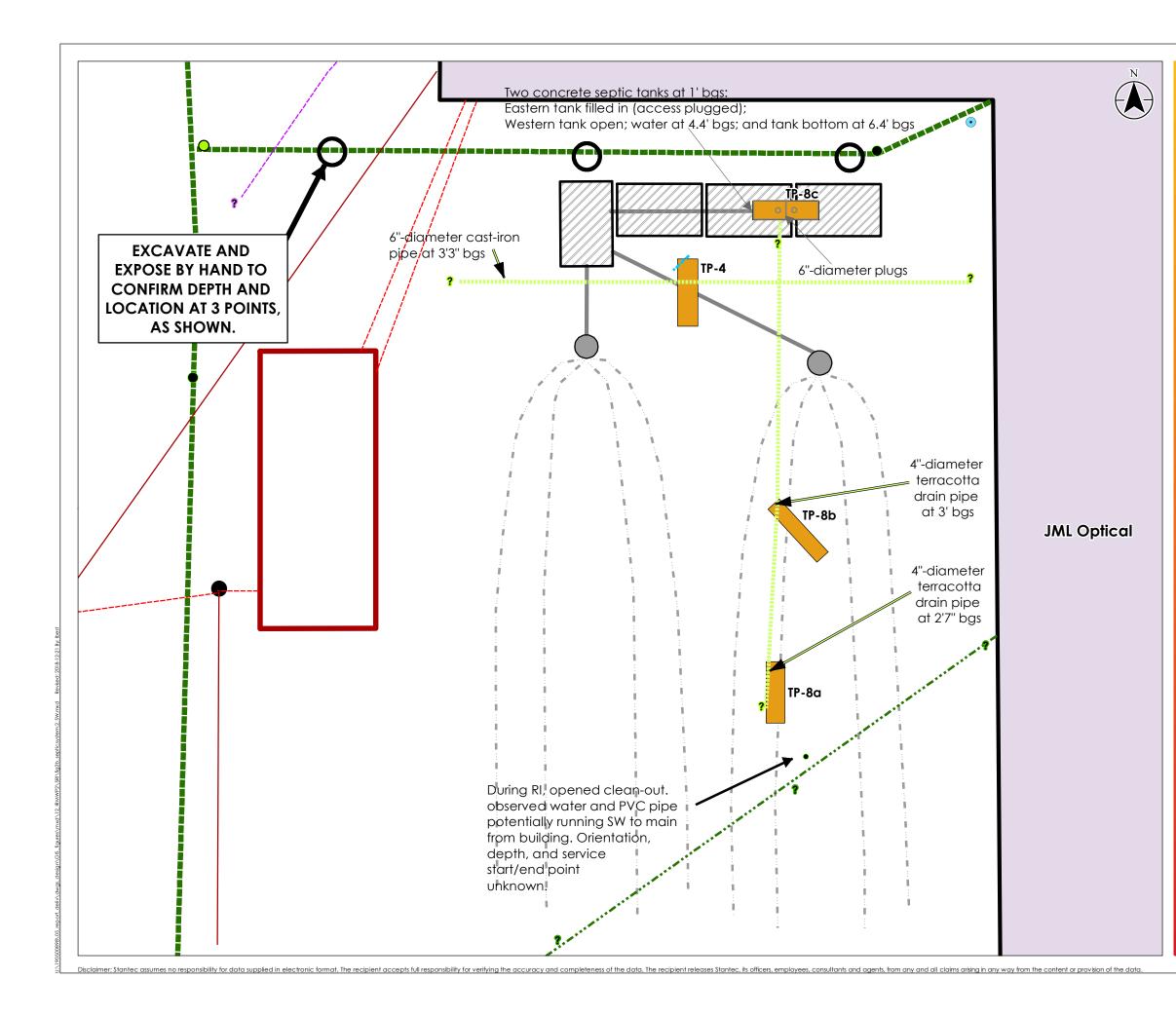
Prepared by LB on 2018-12-1 Technical Review by SRS/RM on 2018-12-18 Independent Review by MS/KI on 2018-12-20 190500898

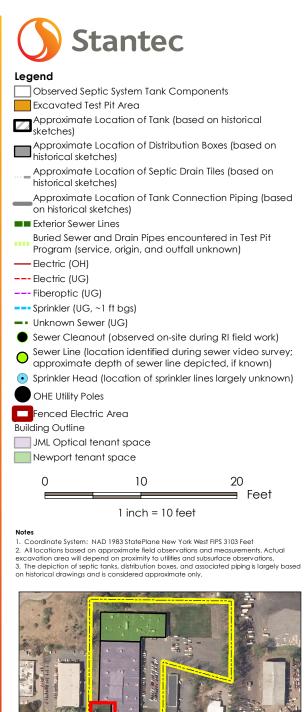
Client/Project 820 Linden Ave Site BCP Site #C828200 Limited SRI Work Plan

Figure No. 2a

Title

Septic System #1 (southeast)





Project Location: 820 Linden Avenue Pittsford, Monroe Co., NY

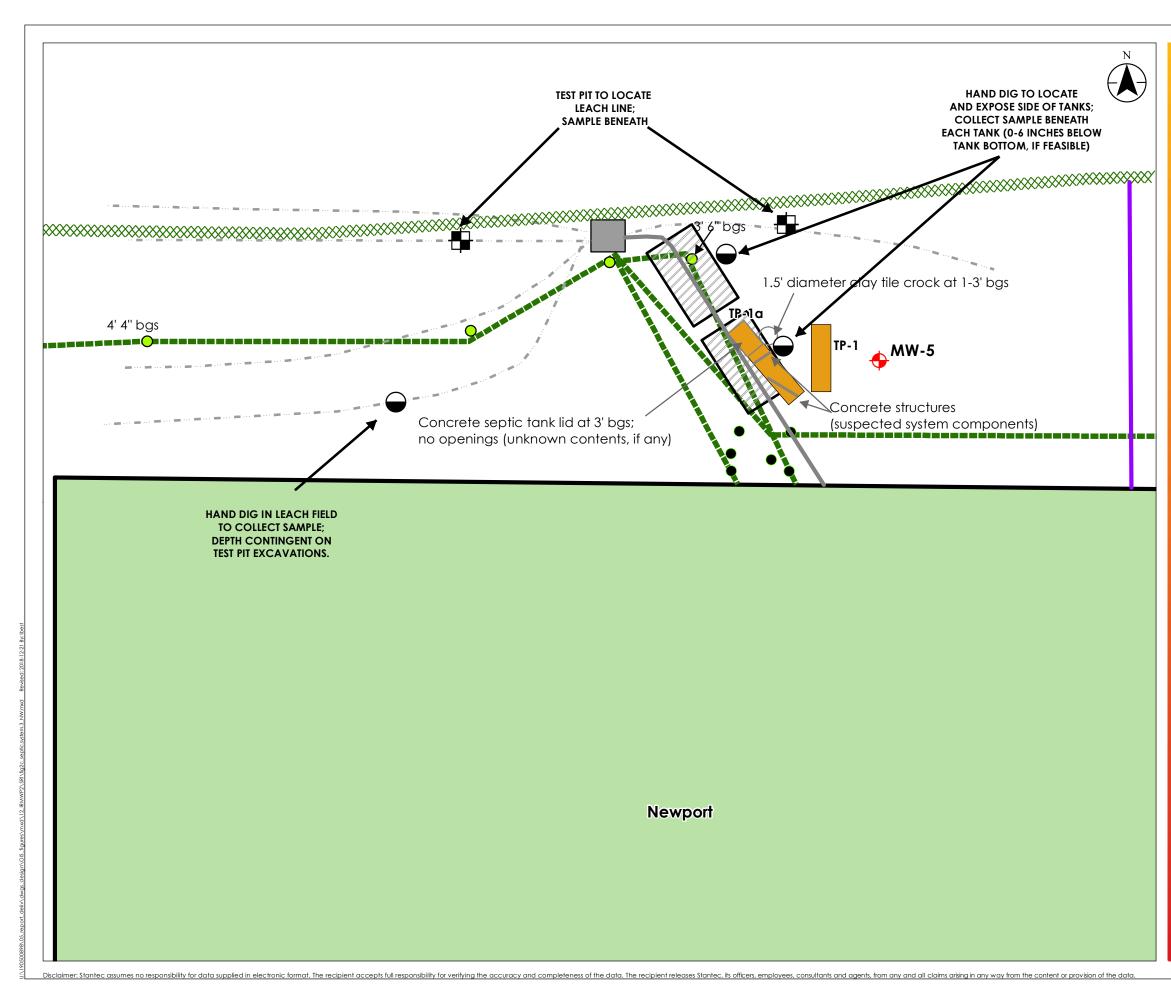
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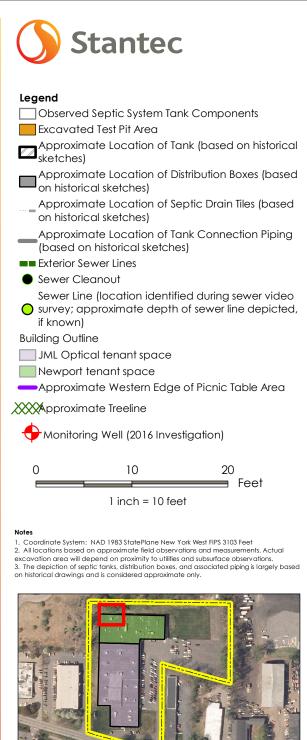
Client/Project 820 Linden Ave Site BCP Site #C828200 Limited SRI Work Plan

Figure No. 2b

Title

Septic System #2 (southwest)





Project Location: 820 Linden Avenue Pittsford, Monroe Co., NY

Prepared by LB on 2018-12-17 Technical Review by SRS/RM on 2018-12-18 Independent Review by MS/KI on 2018-12-20 190500898

Client/Project 820 Linden Ave Site BCP Site #C828200 Limited SRI Work Plan

Figure No. 2c

Title

Septic System #3 (northwest)

Limited Supplemental Remedial Investigation BCP Site # C828200 820 Linden Avenue Pittsford, Monroe County, New York

TABLES

Design with community in mind

Table 1Summary of Proposed SamplesLimited SRI Work Plan

820 Linden Ave BCP Site #C828200 820 Linden Avenue, Pittsford, NY

				Sample Medium, Number of Samples and Analyses ¹													
				Soil Samples				Waste Characterization Samples ²									
Location ID	Location Type	Proposed Depth	Location Rationale	vocs	SVOCs	PCBs	Pesticides	TAL Metals	Cyanide	VOCs	SVOCs	PCBs	Pesticides	IAL Metals	Cyanide	Flashpoint	Но
LF-1	TP	TBD	Investigate soil quality in western leach field area of Septic System #3 (northwest), north of the active sewer line. Test pit to locate piping and sample beneath.	1	1	1	1	1	1					·			
LF-2	TP	TBD	Investigate soil quality in eastern leach field area of Septic System #3 (northwest). Test pit to locate piping and sample beneath.	1	1	1	1	1	1								
LF-3	HD	TBD	Investigate soil quality in western leach field area of Septic System #3 (northwest), south of the active sewer line. Hand dig to sample.	1	1	1	1	1	1								
TANK1-NW	HD/WC	TBD	Investigate soil quality adjacent to septic tank #1 in Septic System #3 (northwest). Investigate tank contents to characterize for future disposal.	1	1	1	1	1	1	2	1	1	1	1	1	1	1
TANK2-NW	HD/WC	TBD	Investigate soil quality adjacent to septic tank #2 in Septic System #3 (northwest). Investigate tank contents to characterize for future disposal.	1	1	1	1	1	1	2	1	1	1	1	1	1	1
TANK1-SE	WC	N/A	Investigate tank contents to characterize for future disposal. The tank encountered during the RI test pit program was observed to contain soil and was sampled for a full suite of analyses. The proposed analyses for this SR are intended to supplement the existing characterization of the tank contents.													1	1
tank2-se	WC	N/A	Investigate tank contents to characterize for future disposal.							2	1	1	1	1	1	1	1
tank1-sw	WC	N/A	Investigate tank contents to characterize for future disposal.							2	1	1	1	1	1	1	1
tank2-sw	WC	N/A	Investigate tank contents to characterize for future disposal.							2	1	1	1	1	1	1	1
tank3-sw	WC	N/A	Investigate tank contents to characterize for future disposal.							2	1	1	1	1	1	1	1
TANK4-SW	WC	N/A	Investigate tank contents to characterize for future disposal.							2	1	1	1	1	1	1	1
			Anticipated totals ⁵ :	5	5	5	5	5	5	14	7	7	7	7	7	8	8

Notes:

1. This table represents an estimate of the number of samples to be collected and analyses performed. Actual numbers will be determined on the basis of conditions encountered in the field; and in accordance with NYSDEC Division of Environmental Remediation's Technical Guidance for Site Investigation and Remediation, May 2010 (DER-10); and in consultation with NYSDEC.

2. Waste characterization sampling media will depend on what each of the tanks contain. If a tank is filled with grout, no sample will be collected. If a tank contains soil fill, a soil sample will be collected. If a tank contains water, the sediment/sludge at the bottom of the tank will be sampled for a full suite and the water sampled for VOCs only. No quality control samples or data usability review are proposed for these waste characterization samples. TICs will not be reported for waste characterization samples.

Abbreviations:

- HD Hand Dig
- LF Leach Field
- N/A not applicable
- NW northwest
- PCBs polychlorinated biphenyls
- SE southeast
- SVOCs TCL semi-volatile organic compounds plus up to 20 TICs
- SW southwest
- TP Test Pit
- TAL USEPA's Target Analyte List
- TBD to be determined (sample depth will be selected based on observed bottom of septic system components)
- TCL USEPA's Target Compound List
- TICs tentatively identified compounds
- TCL United States Environmental Protection Agency
- VOCs TCL volatile organic compounds plus additional NYSDEC CP-51 VOCs plus up to 10 TICs.
- WC Waste Characterization

Table 2Summary of Field Quality Control ChecksLimited SRI Work Plan820 Linden Ave BCP Site #C828200820 Linden Avenue, Pittsford, NY

	Analysis Method			Total				
Analysis Parameters	(USEPA SW846 method number)	Estimated Number of Site Samples	Field Duplicates ³	Trip Blanks ⁴	Rinsate Blanks⁵	MS/MSD ⁶	Number of Samples	
Soil Sampling ¹								
TCL/CP-51 VOCs plus up to 10 TICs	8260C	5	1	0	2	1/1	10	
TCL SVOCs plus up to 20 TICs	8270D	5	1	0	2	1/1	10	
TCL PCBs	8082A	5	1	0	2	1/1	10	
TCL Pesticides	8081B	5	1	0	2	1/1	10	
TAL Metals	6010C/7000 series	5	1	0	2	1/1	10	
Cyanide	9012B	5	1	0	2	1/1	10	
Waste Characterization Sampling ²							-	
TCL/CP-51 VOCs	8260C	14	0	0	0	0/0	14	
TCL SVOCs	8270D	7	0	0	0	0/0	7	
TCL PCBs	8082A	7	0	0	0	0/0	7	
TCL Pesticides	8081B	7	0	0	0	0/0	7	
TAL Metals	6010C/7000 series	7	0	0	0	0/0	7	
Cyanide	9012B	7	0	0	0	0/0	7	
Flashpoint	1010A	8	0	0	0	0/0	8	
рН	SM4500 H+	8	0	0	0	0/0	8	

Notes:

¹ Soil sampling to be performed in Septic System #3 (northwest) area to investigate potential soil impacts from historical septic discharges, in lieu of removing system.

² No QA/QC samples will be collected for the tank contents sampling program. The sample matrix will depend on tank contents.

³ Field duplicates will be collected at a frequency of 1 per 20 samples for each sample medium.

⁴ Trip blanks will be collected at a frequency of 1 per cooler containing aqueous samples to be analyzed for VOCs.

⁵ Rinsate blanks will be collected at a frequency of 1 per mobilization for each sampling method using non-dedicated equipment. At this time it is anticipated that

the non-dedicated equipment will include the excavator bucket and a hand auger/hand spade.

⁶ MS/MSDs will be collected at a frequency of 1 per 20 samples for each sample medium.

Abbreviations:

- MS/MSD matrix spike/matrix spike duplicate
- PCBs polychlorinated biphenyls
- QA/QC Quality Assurance/Quality Control
- SVOCs semi-volatile organic compounds
- TAL USEPA's Target Analyte List
- TCL USEPA's Target Compound List
- TICs tentatively identified compounds
- USEPA United States Environmental Protection Agency
- VOCs volatile organic compounds



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Table 3 Estimated Project Schedule

Supplemental Remedial Investigation Work Plan 820 Linden Ave BCP Site #C828200 820 Linden Avenue, Pittsford, NY

	2019							
Task	Feb	Mar	Apr	May	Jun	luL	Aug	Sep
Supplemental Remedial Investigation Work Plan (SRI WP)								
Resubmit SRI WP	X							
NYSDEC/NYSDOH Review								
Response to NYSDEC comments submitted		X						
NYSDEC Approval		X						
Supplemental Remedial Investigation Field Activities*								
Field Program								
Laboratory Analysis								
Draft RI Report (RIR)								
Laboratory Data Validation								
NYSDEC EDD Submission						Х		
Draft RIR Preparation								
Draft RIR Submission						Х		
NYSDEC Review of Draft RIR								
Respond to Comments, Prepare & Submit Revised RIR								
RIR Approval								X
Public Notice & Fact Sheet Distribution on RIR								Х
Draft Interim Remedial Measures Work Plan #2 (IRM WP#2)								
Draft IRM WP#2 Preparation								
Draft IRM WP#2 Submission						Х		
NYSDEC Review of IRM WP#2								
Respond to Comments, Prepare & Submit Revised IRM WP#2								
IRM WP #2 Approval							X	
Implementation of IRM #2								
Preparation of IRM Specifications								
Contractor Bidding, Bid Evaluation, Contractor Selection								
IRM #2 Implementation								

Blue shaded block indicates NYSDEC-related review and community participation items.

X X indicates a milestone date (document submission or approval).

* The proposed schedule for field activities will be dependent on subcontractor availability and tenant coordination. Tenant operations are sensitive to vibration and prior notice is required to not inturrupt these operations. Thus, it is proposed to plan to mobilize within 30-days of NYSDEC approval.

