EXPLANATION OF SIGNIFICANT DIFFERENCE OPERABLE UNIT NUMBER: 01 STAUBS TEXTILE SERVICES, INC



City of Rochester / Monroe County / Site No. 828160 / February 2018

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

1.0 INTRODUCTION

The purpose of this notice is to describe the progress of the cleanup at the Staubs Textile Services, Inc. Site and to inform you about a change in the site remedy for Operable Unit Number: 01: On-Site source area. The site is located at 935, 951 East Main Street, in the City of Rochester, Monroe County. Operable Unit (OU) Number 01 is the subject of this document. A Record of Decision (ROD) will be issued for OU 02 (bedrock groundwater, off-site groundwater and soil vapor contamination) in the future.

On February 28, 2017, the New York State Department of Environmental Conservation (Department) signed a ROD which selected a remedy to address volatile organic compounds (VOCs) present in on-site source areas at the Staubs Textile Services, Inc, Site. The contaminants of concern are tetrachloroethene (PCE); trichloroethene (TCE); cis-1,2-dichloroethene (1,2-DCE); and vinyl chloride.

During the completion of the Remedial Design for the selected remedy, which included excavation and off-site disposal of contaminated soil, it was identified that hazardous waste was present on-site and the volume of contaminated soil requiring removal increased from 2,074 cubic yards to over 7,000 cubic yards. This information was originally not contemplated by the ROD. The additional soil volume and presence of hazardous waste increases the original cost estimate for excavation from \$1,700,000 to approximately \$5,000,000.

Soil vapor extraction (SVE) and a targeted soil removal has been selected as the new remedy for the site. Soil removal will occur at locations that contain the highest concentrations of site contaminants. The targeted soil excavation will remove approximately 160 cubic yards of highly contaminated soil in addition to 2,090 cubic yards of additional soil, slab, and foundations. SVE will then be implemented to remove remaining volatile organic compounds (VOCs) from the subsurface. VOCs will be physically removed from the soil by applying a vacuum to wells that have been installed into the vadose zone (the area below the ground but above the water table). The vacuum draws air through the soil matrix which carries the VOCs from the soil to the SVE well. The air extracted from the SVE wells is then treated as necessary prior to being discharged to the atmosphere.

In order to treat soils exceeding protection of groundwater SCOs, sixteen SVE wells will be installed into the vadose zone and screened from two feet below the ground surface to a depth of approximately 18 feet. The air containing VOCs extracted from the SVE wells will be treated by passing the air stream through a cataylic oxidizer unit, which removes the VOCs from the air, prior to it being discharged to the atmosphere. Two wells will be installed, and operated as necessary, adjacent to an off-site building to prevent the potential migration of contaminated soil vapor.

SVE is a remedial option which was deemed to be viable in the ROD, but was not originally selected since the original cost estimates to remove the on-site soil source via excavation and SVE were comparable. Prior to the ROD, an SVE pilot test was conducted from August 2013 to August 2015 in which approximately 22,000 pounds of PCE were removed, and it was determined that the SVE system was effective in remediating soil vapor concentrations observed at the site. Additionally, targeting the most contaminated soils at the site for excavation and off-site disposal will allow for a shorter SVE treatment time. Following the identification of hazardous waste at the site and the increased volume of contaminated soil, the Department compared SVE and the pilot test results to the criteria within the March 2017 ROD. It was determined that SVE with targeted soil removal would likely achieve the goals of the March 2017 ROD, but at a decreased cost compared to excavation and off-site disposal of contaminated soil and with less disruption to the community.

This Explanation of Significant Difference (ESD) will become part of the Administrative Record for this Site. The information here is a summary of what can be found in greater detail in documents that have been placed in the following repositories:

Office Hours:

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Monroe County Library System	Monday:	12 PM – 8 PM
Monroe Branch Library	Tuesday:	10 AM - 6 PM
809 Monroe Avenue	Wednesday:	12 PM – 8 PM
Rochester, NY 14607	Thurs, Friday:	12 PM – 8 PM
(585) 428-8202	Saturday:	10 AM – 2 PM
	Sunday:	Closed

Although this is not a request for comments, interested persons are invited to contact the Department's Project Manager for this site to obtain more information or have questions answered. The Project Manager's contact information is:

Ms. Sarah Saucier, P.E., Project Manager NYS Department of Environmental Conservation Division of Environmental Remediation 625 Broadway, 12th Floor Albany, NY 12233-7017 Telephone: (518) 402-9675 Email: <u>sarah.saucier@dec.ny.gov</u>

2.0 SITE DESCRIPTION AND ORIGINAL REMEDY

2.1 Site History, Contamination, and Selected Remedy

The Staubs Textile Services, Inc. site is approximately 1.2 acres and located in a mixed commercial/residential area on the northeast side of the city. The site is currently owned by Circle Street Development, LLC and used as a parking lot. The site contains no buildings and is bound by East Main Street to the north, commercial properties to the west and east, and a residential neighborhood to the south.

The site has a 70-year history of use as an industrial laundry and dry cleaning service. Operations at the facility ceased in 2005 and it has been vacant since that time. The on-site building was demolished in June 2017 to facilitate construction as a parking lot.

A Remedial Investigation was conducted to define the nature and extent of any contamination resulting from previous activities at the site. Volatile organic compounds, specifically PCE and its associated degradation products, were detected in soil, groundwater, and soil vapor at the site. On-site soil contained concentrations of PCE at levels up to 70,000 parts per million (ppm), predominately at the south end of the site. PCE and its associated degradation products were detected in groundwater substantially exceeding the groundwater standard of 5 parts per billion (ppb), with a concentration of PCE up to 252,800 ppb. Data does not indicate any off-site impacts in soil related to this site. Site-related contamination has been found in off-site groundwater and soil vapor; therefore, additional groundwater and soil vapor intrusion sampling will be conducted under Operable Unit Number 2. The site was deemed to represent a significant threat to public health and the environment due to the soil, soil vapor, and groundwater contamination on and off the site.

Previous work completed at the site includes a tank removal completed in October 2012 in which six underground storage tanks (USTs) were excavated and removed and one tank was closed in place. In August 2013, a soil vapor extraction system was installed as part of a pilot test in the former dry cleaner. The SVE system operated until removal on August 20, 2015. Approximately 22,000 pounds of PCE were removed during the operation of the SVE system.

The major components of the February 2017 Original Remedy were listed as follows:

1. A remedial design program will be implemented to provide the details necessary for the construction, operation, maintenance, and monitoring of the remedial program. Green remediation principals and techniques will be implemented to the extent feasible in the design, implementation, and site management of the remedy as per DER-31.

2. The existing on-site building(s) will be demolished. Excavation and off-site disposal of all on-site soils which exceed commercial SCOs and treatment of on-site soils using in-situ chemical treatment which exceed protection of groundwater SCOs, as defined by 6 NYCRR Part 375-6.8. The total volume of soils excavated is approximately 2,074 cubic yards. Dewatering and treating the groundwater during excavation. Clean fill meeting the requirements of 6 NYCRR Part 375-6.7(d) will be brought in to replace the excavated soil and establish the designed grades at the site.

3. Vapor Mitigation System: Any on-site buildings will be required to have a sub-slab depressurization system, or a similar engineered system, to mitigate the migration of vapors into the building from soil and/or groundwater.

4. Placement of an environmental easement on the property to limit use to commercial, which also allows for industrial uses, as permitted by local zoning. The use of groundwater as a source of potable or process water would require the necessary water quality treatment and compliance with an approved site management plan.

5. A Site Management Plan is required, which will include the following:

- an Excavation Plan which details the provisions for management of future excavations in areas of remaining contamination;
- description of the provisions of the environmental easement including any land use restrictions;
- provisions for the management and inspection of the identified engineering controls;

- maintaining site access controls and Department notification; and
- the steps necessary for the periodic reviews and certification of the institutional controls.
- A Monitoring Plan to assess the performance and effectiveness of the remedy.

3.0 CURRENT STATUS

The on-site buildings have been demolished and the building slabs remain. The Department will remove a targeted area of contaminated soil at the site and install an SVE system to achieve the cleanup goals outlined in the ROD. A pilot test was conducted from August 2013 to August 2015 in which it was determined that the SVE system was effective in remediating the VOCs, specifically PCE and its degradation products, at the site. With the targeted soil removal, it is anticipated the total runtime of the SVE system will be decreased.

Following installation of the SVE system, the Department will conduct an operation and maintenance program and complete long-term monitoring to ensure groundwater contaminant levels continue to decline.

4.0 DESCRIPTION OF SIGNIFICANT DIFFERENCE

4.1 New Information

It was identified that hazardous waste was present on-site and the volume of contaminated soil increased from 2,074 cubic yards estimated in the ROD to over 7,000 cubic yards. During the design, it was determined that approximately 7,000 cubic yards of soil would be required to be removed from the site for disposal, with 5,000 cubic yards deemed to be hazardous waste. This increased the original cost estimate for excavation from \$1,700,000 to approximately \$5,000,000. SVE is a remedial option which was deemed to be viable in the ROD, but was not originally selected since the original cost estimates to remove the source via excavation and SVE were comparable. Due to the additional hazardous and non-hazardous waste identified on-site, SVE with a targeted soil removal has been chosen as the new remedy for the site. The targeted excavation will be performed in a discrete area using readily available standard sized sheeting and shoring and will remove the highest concentration of soil contamination (PCE concentrations generally in excess of 50,000 ppm) at the site. The targeted soil excavation will remove approximately 160 cubic yards of highly contaminated soil in addition to the 2,090 cubic yards of soil, slab, and foundations being removed to facilitate the SVE remedy. A total volume of 2,240 cubic yards of material is anticipated to be excavated and disposed of under the new remedy, which is comparable to the 2,074 cubic yards originally identified in the ROD.

SVE is an alternative which was deemed to be viable in the ROD, but was not originally selected since the original cost estimates to remove the source via excavation and SVE were comparable. The SVE pilot test conducted from August 2013 to August 2015 determined that the SVE system was effective in remediating soil vapor concentrations observed at the site. The Department compared SVE and the pilot test results to the criteria within the March 2017 ROD and determined that SVE with targeted soil removal would achieve the goals of the March 2017 ROD, but at a decreased cost and with less disruption to the community. With the targeted soil removal, it is anticipated the total runtime of the SVE system will be decreased.

Although not anticipated, in the event significant groundwater is encountered during the installation of the SVE system, air sparging may be implemented to address the groundwater plume contaminated by VOCs. VOCs are physically removed from the groundwater and soil below the water table (saturated soil) by injecting air into the subsurface. The injected air rising through the groundwater will volatilize and transfer the VOCs from the groundwater and/or soil into the injected air. The VOCs are carried with the injected air into the vadose zone (the area below the ground surface but above the water table) where a SVE system designed to remove the injected air will be installed. The SVE system will apply a vacuum to wells that have been installed into the vadose zone to remove the VOCs along with the air introduced by the sparging process. The air extracted from the SVE wells will be treated as necessary prior to being discharged to the atmosphere.

4.2 Comparison of Changes with Original Remedy

A summary of the changes to the original ROD as proposed in this document are shown below. The 2017 ROD element is described, followed by any modifications or additions made by this ESD.

2017 ROD	ESD Changes
 A remedial design program will be implemented to provide the details necessary for the construction, operation, maintenance, and monitoring of the remedial program. Green remediation principals and techniques will be implemented to the extent feasible in the design, implementation, and site management of the remedy as per DER-31. The major green remediation components are as follows; Considering the environmental impacts of treatment technologies and remedy stewardship over the long term; Reducing direct and indirect greenhouse gas and other emissions; Increasing energy efficiency and minimizing use of non- renewable energy; Conserving and efficiently managing resources and materials; Reducing waste, increasing recycling and increasing reuse of materials which would otherwise be considered a waste; Maximizing habitat value and creating habitat when possible; Fostering green and healthy communities and working landscapes which balance ecological, economic goals; and Integrating the remedy with the end use where possible and encouraging green and sustainable re-development. 	No Change
2. The existing on-site building(s) will be demolished (by others). The building slab will subsequently be removed and all	Modified
soils which exceed commercial SCOs will be excavated and	2. The existing on-site building(s) will be
disposed off-site. Remaining soils which exceed protection of	demolished. Treatment of all on-site soils which
groundwater SCOs, as defined by 6 NYCRR Part 375-6.8, will	exceed protection of groundwater SCOs, as defined
be subject to treatment using in-situ chemical treatment. The	by 6 NYCRR Part 375-6.8, using soil vapor

SUMMARY OF PROPOSED REMEDY CHANGES Staubs Textile Services, Inc. (No. 828160) ESD

total volume of soils excavated is approximately 2,074 cubic yards. The remedial program will include dewatering and treating the groundwater during excavation. Clean fill meeting the requirements of 6 NYCRR Part 375-6.7(d) will be brought in to replace the excavated soil and establish the designed grades at the site.	extraction. The total volume of soil, slab, and foundation excavated is approximately 2,190 cubic yards. Dewatering and treating the groundwater during excavation, if encountered. Clean fill meeting the requirements of 6 NYCRR Part 375-6.7(d) will be brought in to replace the excavated soil and establish the designed grades at the site. <i>Modified</i>
3. Vapor Mitigation System: Any on-site buildings will be required to have a sub-slab depressurization system, or a similar engineered system, to mitigate the migration of vapors into the building from soil and/or groundwater.	 3. Any on-site buildings required to have a sub-slab depressurization system (SSDS), or a similar engineered system, to mitigate the migration of vapors into the building. The SVE system will also mitigate the migration of vapors into on-site or adjacent buildings. Appropriate monitoring will be conducted to ensure the system is effectively addressing the potential for soil vapor intrusion. In the event operation of the SVE system is discontinued a soil vapor intrusion evaluation will be conducted. The evaluation will include a provision for implementing evaluation will include a provision
	for implementing actions recommended to address exposures related to soil vapor intrusion.
 4. Imposition of an institutional control in the form of an environmental easement for the controlled property which will: require 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); allow the use and development of the controlled property for commercial use as defined by Part 375-1.8(g), although land use is subject to local zoning laws; restrict 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; and require compliance with the Department approved Site Management Plan. 	No Change
5. A Site Management Plan is required, which will include the following:	Addition to 2017 ROD Remedial Element 5 – Site Management Plan
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 assure the following institutional and/or engineering controls remain in place and effective: Institutional Controls: Will include the implementation of	• a provision that should a building foundation or building slab be removed in the future, a cover system consistent with that described below will be placed in any areas where the upper one foot of exposed surface soil exceed the applicable soil cleanup objectives (SCOs)
land-use restrictions as set forth above. Engineering Controls: The Vapor Mitigation System as discussed in paragraph 2.	c) an Operation and Maintenance (O&M) Plan to ensure continued operation, maintenance, optimization, monitoring, inspection, and reporting of

 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; description of the provisions of the environmental easement including any land use restrictions; provisions for the management and inspection of the identified engineering controls; maintaining site access controls and Department notification; and the steps necessary for the periodic reviews and certification of the institutional controls. b) A Monitoring Plan to assess the performance and effectiveness of the remedy. The plan includes, but may not be limited to: Monitoring of soil, groundwater or soil vapor to assess the performance and effectiveness of the remedy; Schedule of monitoring and frequency of submittals to the Department. 	 any mechanical or physical components of the remedy. The plan includes, but is not limited to: procedures for operating and maintaining the remedy; compliance monitoring of treatment systems to ensure proper O&M as well as providing the data for any necessary permit or permit equivalent reporting; maintaining site access controls and Department notification; and providing the Department access to the site and O&M records.
	Addition to Remedy A site cover will be required to allow for commercial use of the site in areas where the upper one foot of exposed surface soil will exceed the applicable SCOs. Where a soil cover is to be used it will be a minimum of one foot of soil placed over a demarcation layer. Soil cover material, including any fill material brought to the site, will meet the SCOs for cover material for use of the site as set forth in 6 NYCRR Part 375-6.7(d). Substitution of other materials and components may be allowed where such components already exist or are a component of the tangible property to be placed as part of site redevelopment. Such commonants may include, but one not
	Such components may include, but are not necessarily limited to: pavement, concrete, paved surface parking areas, sidewalks, building foundations and building slabs.

The operation of the components of the remedy will continue until the remedial objectives have been achieved, or until the Department determines that continued operation is technically impracticable or not feasible.

The remedy described in this ESD has been determined to be protective of human health and the environment and complies with New York State Standards, Criteria and Guidance. The new remedy will result in the removal of contaminated soils exceeding remediation goals, but will still require an environmental easement and long term monitoring. The new remedy will permanently reduce the toxicity, mobility and volume of contaminants by use of physical treatment. This new remedy is least disruptive with respect to short term impacts and SVE is an effective method for in-situ treatment of contaminated

soils. The targeted soil removal will permanently remove the most contaminated soil on site is anticipated to decrease overall SVE system runtime. SVE with targeted soil removal is readily implementable and, based on the increased volume of hazardous soils, this remedy has been found to be cost effective. The new remedy is consistent with the current, intended and reasonably anticipated future land use, which is commercial, and any residual contamination will be controllable with implementation of a Site Management Plan.

5.0 SCHEDULE AND MORE INFORMATION

The Department is currently completing the design for the SVE plus targeted soil removal remedy and intends to begin construction of the remedy in March 2018. It is anticipated the SVE system will operate for approximately three years. Long-term monitoring will continue to ensure groundwater contaminants levels continue to decline. Periodic Fact Sheets will be issued to keep the public informed of the ongoing remedial program.

If you have questions or need additional information you may contact any of the following:

Project Related Questions

Sarah Saucier, P.E., Project Manager NYS Department of Environmental Conservation Division of Environmental Remediation 625 Broadway, 12th Floor Albany, NY 12233-7017 (518) 402-9675 <u>sarah.saucier@dec.ny.gov</u>

Regina Willis, Citizen Participation Specialist NYS Department of Environmental Conservation Division of Environmental Remediation 6274 East Avon-Lima Road Avon, NY 14414 (585) 226-6335 regina.willis@dec.ny.gov

Bernette Schilling, PE, Region 8 Remediation Engineer NYS Department of Environmental Conservation Division of Environmental Remediation 6274 East Avon-Lima Road Avon, NY 14414 (585) 226-5315 bernette.schilling@dec.ny.gov

Site-Related Health Questions

Melissa Doroski New York State Department of Health Bureau of Environmental Exposure Investigation Empire State Plaza, Corning Tower, Room 1787 Albany, NY 12237 (518) 402-7860 BEEI@health.ny.gov

02/15/2018	Sarah Saucier
Date	Sarah Saucier, P.E., Project Manager
02/16/2018	Remedial Section A. Remedial Bureau E
Date	David Harrington, P.E., Section Chief
	Remedial Section A, Remedial Bureau E
02/15/2018	Millell
Date	Michael Cruden, P.E., Bureau Director
	Remedial Bureau E
02/16/2018	milegz
Date	Michael Ryan, P.E., Assistant Division Director
	Division of Environmental Remediation

DECLARATION

The selected remedy is protective of public health and the environment, complies with State and Federal requirements that are legally applicable or relevant and appropriate to the remedial action to the extent practicable, and is cost effective. This remedy utilizes permanent solutions and alternative treatment or resource recovery technologies, to the maximum extent practicable, and satisfies the preference for remedies that reduce toxicity, mobility, or volume as a principal element.

