EXPLANATION OF SIGNIFICANT DIFFERENCE
FORMER DORO DRY CLEANERS SITE

Town of Cheektowaga / Erie County / Site No. 915238 / March 2017

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 Former Doro Dry Cleaners site and to inform you about a change in the site remedy. The site is located at 3460-3466 Genesee Street, on the northeast corner of Genesee and Colden Court. On March 31, 2014, the New York State Department of Environmental Conservation (NYSDEC) issued a Record of Decision (ROD) which selected a remedy to clean up the site. The selected remedy consisted, in part, of the following:

- Excavation and off-site disposal of unsaturated soil (soil above the groundwater table) contaminated with chlorinated volatile organic compounds (VOCs), primarily perchloroethylene (PCE) and trichloroethylene (TCE). These soils are located on site, immediately adjacent to the east and west side of the Doro buildings.
- The addition of amendments that promote the degradation of groundwater contaminants to the soils used to backfill the excavations, to enhance groundwater and residual saturated soil (soil below the groundwater table) remediation.

Based on tests and evaluations conducted during the design phase of the project, it was determined that excavation will not be an implementable remedy due to structural concerns with excavating near the building, or cost effective in achieving the site remedial goals. A more feasible method will be to treat the soils above the groundwater table in place, using soil vapor extraction. Soil vapor extraction (or "SVE") has been shown by a pilot test to be effective and will be implemented to remove chlorinated 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.

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 local NYSDEC office:

NYSDEC Buffalo Office
270 Michigan Avenue
Buffalo, New York 14203-2915
Office hours: 8:30 AM to 4:45 PM, Monday through Friday

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

David Locey, Project Manager
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2.0 SITE DESCRIPTION AND ORIGINAL REMEDY

2.1 Site History, Contamination, and Selected Remedy

The Former Doro Dry Cleaners site is located on the northeast corner of Genesee Street and Colden Court, in the Town of Cheektowaga, Erie County. Two attached buildings are located on the site, both are currently used for storage. Commercial properties are located to the east, west and south of site; homes lie to the north along Colden Court.

A commercial dry cleaning facility occupied the site buildings for approximately 40 years until 2006. Dry cleaning equipment and stored chlorinated solvents occupied the larger of the two buildings. Investigations found soil contamination limited to the site on either side (east and west) of the larger building. A groundwater contaminant plume extended to the northwest beneath Colden Court. The air and soil vapor within and beneath several homes along Colden Court were tested and a sub slab depressurization system (SSDS) was installed in one home to mitigate the intrusion of contaminated soil vapor. Mitigation of the other homes tested was not warranted. One owner declined the NYSDEC's offer to sample the indoor air and soil vapor beneath their home.

The elements of the site remedy selected in 2014 included:

- Excavation and off-site disposal of unsaturated soils (i.e., soils above the groundwater table) from two areas along the outside of the site building, target remediation zones 1 and 3 (west and east sides of the large on-site building, respectively);
- Addition of an amendment/reactant to the excavation backfill to treat the groundwater contamination beneath the building (target remediation zone 2) and beyond the site;
- Installation of an SSDS in the on-site buildings;
- Continued operation and maintenance of the SSDS installed in the home located off site;
- Removal of contaminated sediment from a sump and connected floor drains and sewers within the larger of the two connected on-site buildings; and
- Imposition of an institutional control in the form of an environmental easement that will outline and enforce restrictions on the future use of the site and require compliance with a NYSDEC-approved Site Management Plan.

3.0 CURRENT STATUS

The NYSDEC has identified a potentially responsible party (PRP) and is negotiating a legal agreement (Order on Consent) for that party to undertake the cleanup of the site. The PRP will submit a remedial action work plan for NYSDEC review, detailing the measures for implementing the cleanup as outlined

in this revision to the ROD. The remedial work is expected to begin in 2017.

4.0 DESCRIPTION OF SIGNIFICANT DIFFERENCE

4.1 New Information

The modification of the site remedy has been made on the basis of design evaluations and field investigations conducted in 2015 and 2016.

It had been assumed that excavating contaminated soils near the building would require a shoring system to protect the building's structural integrity. Based on detailed evaluations conducted during the design phase of the project, it was determined that vibrations created during the installation of the shoring system itself could damage the structure. Strengthening the building foundation would reduce the risks of structural damage but would be labor intensive and expensive. Sloping the remedial excavation away from the building would eliminate the need for shoring but it would leave some contaminated soils in place.

A recent pilot scale test found that SVE will be an effective remedy for the contaminated soils above the groundwater table. SVE extracts vapors from the soil by applying a vacuum. Removing the soil vapor allows for more of the site's volatile contaminants to be progressively extracted from the soils as vapor. SVE would be accomplished with a grid of soil borings, spaced about ten feet apart, in the target remediation zones 1 and 3; the contaminated soils will not be excavated but will be treated in place. The underlying groundwater and soils within the groundwater table will also be treated in place, by injecting amendments/reactants through other borings, directly into the deeper contamination.

4.2 Comparison of Changes with Original Remedy

SVE will eliminate the need to excavate the contaminated soils and will reduce the risks of damage to the building. The vacuum applied to the extraction wells will induce a vacuum in the subsurface a given distance away from the extraction well. SVE will have the added advantage of treating any contaminated soils beneath the site building nearest the treatment zones, from extraction borings outside of the building. SVE will also be considerably more cost effective than excavation and off-site disposal.

The original remedy relied upon the movement of groundwater to distribute the amendments/reactants in the excavation backfill to treat the underlying, deeper contaminated soils and groundwater. Injecting the amendments/reactants directly into the deeper contamination will be a more effective method of maximizing the contact between reactant and contaminant.

The ROD, as modified by this ESD, is protective of public health and the environment, and meets the goals of the March 2014 ROD.

5.0 SCHEDULE AND MORE INFORMATION

After the Order on Consent is signed and a remedial action work plan is approved by the NYSDEC, the potentially responsible party will implement the revised remedy. Remedial work is expected to begin in 2017.

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

Project Related Questions
David Locey, Project Manager
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Date

David Locey, Project Manager
Region 9

Date

Chad Staniszewski, RHWRE
Region 9

3/20/17

Date

Michael Cruden, Director
Remedial Bureau E

3/20/2017

Date

Robert Schick, Director
Division of Environmental Remediation

DECLARATION

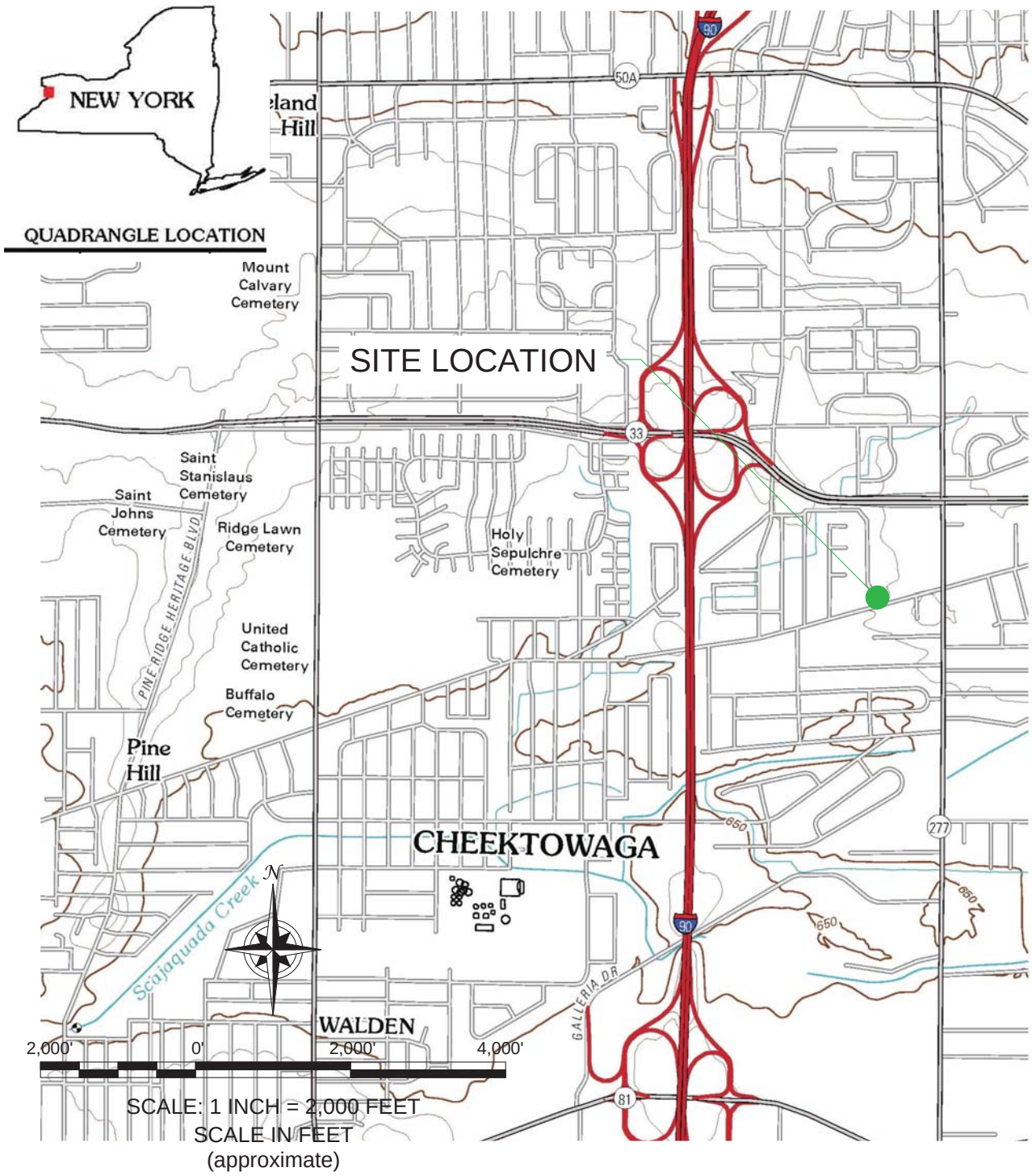
The selected remedy is protective of public health and the environment, complies with State and Federal requirements that are legally applicable or relevant and appropriate to the remedial action to the extent practicable, and is cost effective. This remedy utilizes permanent solutions and alternative 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.

TABLE 1
SUMMARY OF REMEDY CHANGES
Former Doro Dry Cleaners (Site #915238) - Explanation of Significant Differences
March 2017

Media	March 2014 ROD	Revised Remedy
Soil	1) An estimated 648 cubic yards of unsaturated soils in Target Remediation Zones 1 and 3 contaminated with chlorinated VOCs (primarily PCE and TCE) will be excavated and disposed off site. 2) A Site Management Plan will be prepared, which includes an Excavation Plan detailing the provisions for management of future excavations in areas of remaining contamination.	1) Unsaturated soils (soils above the water table) will be treated in place by Soil Vacuum Extraction (SVE). 2) Unchanged.
Groundwater	1) Amendments/reactants that promote the degradation of groundwater contaminants (primarily cis-DCE and vinyl chloride) will be added to the soils used to backfill the excavation. 2) The Site Management Plan will include monitoring of groundwater to assess the performance and effectiveness of the remedy. 3) An institutional control in the form of an environmental easement will be imposed for the controlled property that restricts 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.	1) Amendments/reactants will be injected directly into the groundwater through soil borings, in the target remediation zones. 2) Unchanged. 3) Unchanged.
Soil Vapor/Indoor Air	1) A sub-slab depressurization system (SSDS) in the on-site buildings. 2) The SSDS installed in one of the off-site buildings will continue to be operated and maintained. 3) A determination will be made if soil vapor intrusion (SVI) sampling of one other off-site building is appropriate, if and when the building owner requests that it be evaluated.	1) Two SSDSs have been installed, one in each of the two connected buildings on site. 2) Unchanged. 3) Unchanged.
Other Media	Standing water and sediment, in a sump in one of the on-site buildings and in the floor drains and sewers connected to the sump, will be removed and disposed off site.	Unchanged.

F:\CAD\Benchmark\Doritex Corp\SVE Report\Figure 1; Regional Site Plan.dwg

FIGURE 1



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PROJECT NO.: 0359-015-001

DATE: JULY 2016

DRAFTED BY: RFL

REGIONAL LOCATION PLAN

SVE PILOT STUDY REPORT

FORMER DORO CLEANERS SITE
CHEEKTOWAGA, NEW YORK

PREPARED FOR
DORITEX CORP.

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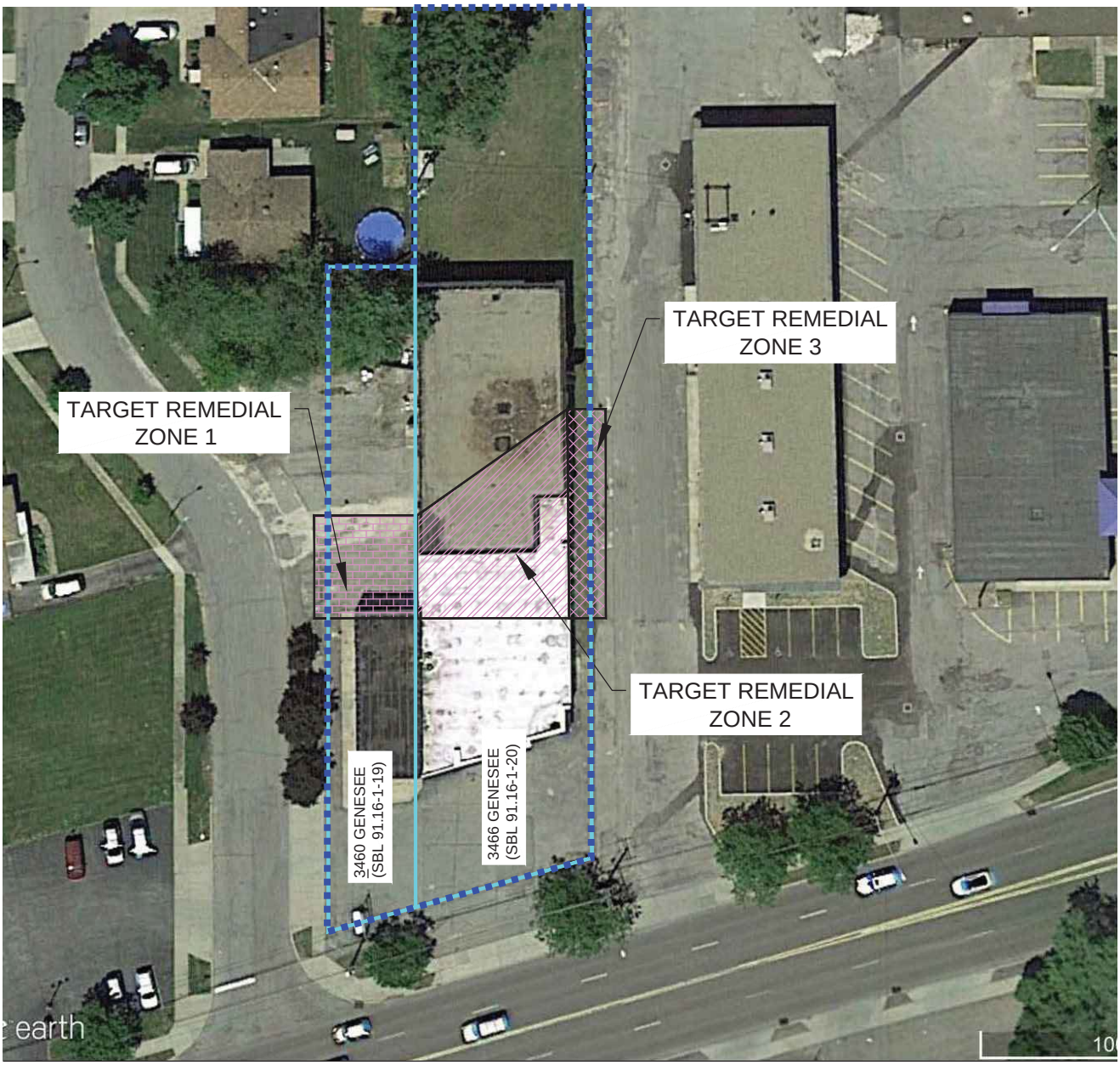
FIGURE 2



60' 0' 60' 120'

SCALE: 1 INCH = 60 FEET
SCALE IN FEET
(approximate)

N

LEGEND:
SITE BOUNDARY
TAX PARCEL BOUNDARY

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SITE LOCATION PLAN WITH TARGET REMEDIAL ZONES

SVE PILOT STUDY REPORT

FORMER DORO CLEANERS SITE
CHEEKTOWAGA, NEW YORK

PREPARED FOR
DORITEX CORP.

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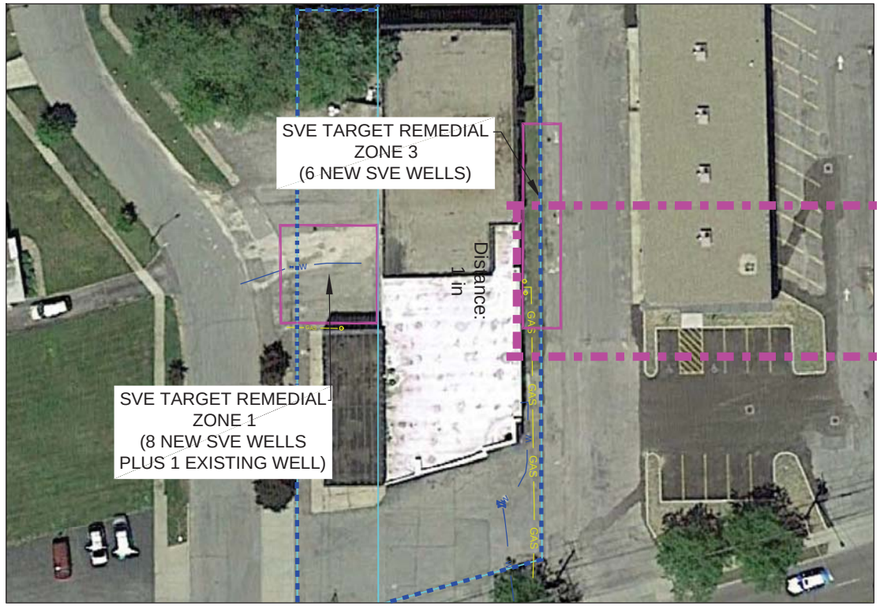
LEGEND

- PROPERTY BOUNDARY
- SVE-1 — EXISTING SVE WELL
- PROPOSED SVE WELL
- MW-1 — MONITORING WELL
- EXISTING WATER LINE
- EXISTING WATER VALVE
- EXISTING GAS LINE
- EXISTING GAS METER
- EXISTING BUILDING WALL



PLAN VIEW OF SITE AND TARGET SVE REMEDIAL ZONES

APPROX. SCALE 1" = 60'

SVE TARGET REMEDIAL ZONE 1

APPROX. SCALE 1" = 10'

SVE TARGET REMEDIAL ZONE 3

APPROX. SCALE 1" = 10'

DATE: JULY 2016
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SVE FULL SCALE PRELIMINARY LAYOUT

SVE PILOT STUDY REPORT
FORMER DORO CLEANERS SITE
CHEEKTOWAGA, NEW YORK

PREPARED FOR
DORITEX CORP.

FIGURE 3