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Municipal Brownfields - B
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Spills - SP
ERP - E
VCP - V
BCP - C

SOIL VAPOR INTRUSION EVALUATION

WORK PLAN

For

CMS ASSOCIATES REMEDIATION SITE
Site no. 9-15-168

210 French Road
Town of Cheektowaga
Erie County NY

August 2009
Modified April 24, 2013

FINAL

Approved April 25, 2013

Prepared for:

CMS Property Associates, LLC
228 Linwood Avenue
Buffalo NY 14209

Ken W. Kloeber
Consulting Engineers ENVIRONMENTAL SOLUTIONS • CIVIL & SANITARY ENGINEERING • PLANNING & DESIGN
PO BOX 140 • BOSTON NY 14025 • 716-864-0012 • Fax 775-860-3804 • KloeberEng@aol.com

SOIL VAPOR INTRUSION EVALUATION WORK PLAN

CMS Associates Inactive Hazardous Waste Site
Site no. 9-15-168

210 French Road
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Erie County NY

Prepared for:

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By:

Ken W. Kloeber Consulting Engineers
PO Box 140
Boston NY 14025-0140
KloeberEng@aol.com

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TABLE of CONTENTS

I INTRODUCTION

1.1 Purpose of Work Plan

This document is the work plan for a Soil Vapor Intrusion Evaluation at the CMS Associates groundwater remediation site at 210 French Road in the town of Cheektowaga; Erie County, NY. See Figure 1 for the CMS Site location. This plan is a modification of the approved 2009 work plan that CMS implemented during the 2010-2011 heating season.

Proposed Modifications to Approved Work Plan

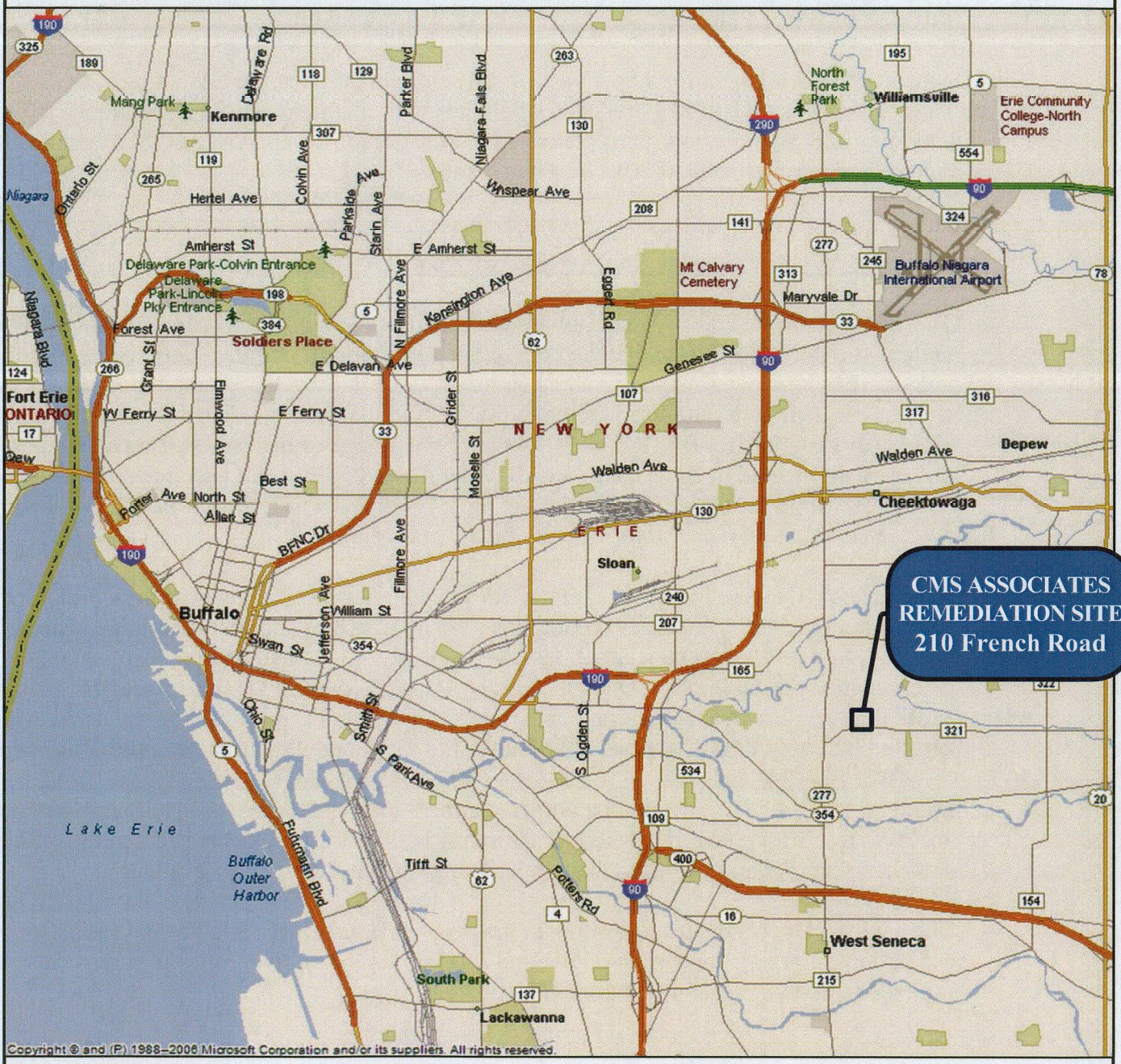
The approach of the 2009 Work Plan was to test only sub-slab vapor at the 210 French Road building on the CMS Site, and at the buildings on adjacent properties—initially excluding testing indoor air and inventorying the building contents. That approach presumed that regulated VOCs were not present under the surrounding buildings, and that two sub-slab depressurization systems previously installed in the 210 French building have mitigated the impact from sub-slab vapors that were discovered in 2004-2005. To allow for the possibility that encountered conditions could differ from the above, the Work Plan included the provision that "*Changed or unexpected site conditions may require adjustments to the Work Plan.*"

Regulated VOCs were found beneath the 210 French and surrounding buildings, which is a change from the anticipated field conditions. When regulated compounds are identified beneath building slabs, indoor air concentrations must typically be evaluated in order to make SVI determinations using the NYSDOH *SV/Indoor Air Decision Matrix*. Therefore, this modified Work Plan proposes concurrent indoor air and sub-slab sampling and testing by an ELAP-certified lab using EPA Compendium Method TO-15, along with ambient outdoor air sampling.

Initial contact with the surrounding property owners indicate that we can gain permission for access to test. However, the owner of 109 Industrial Parkway has denied access for further sub-slab or indoor air testing, so that property is excluded from further evaluation.

The work will be conducted according to the NYSDOH guidance for soil vapor intrusion evaluations, utilizing concurrent indoor and sub-slab tests and inventories of materials stored or used in the buildings that might affect indoor VOC levels.

The project area is a Class 4 inactive hazardous waste disposal site (NYSDEC no. 9-15-168) where a leaking outdoor UST was removed in March 1996, and an undetermined volume of tank contents (see Table 1) contaminated the surrounding soil and entered the underlying bedrock and groundwater.



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No Scale

CMS Associates Remediation Site
Soil Vapor Intrusion Evaluation Work Plan

Figure 1

SITE LOCATION

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Table 1

Primary Constituents of Leaking UST

Compound	ppm vol
1,1,1-Trichlorethane	200,000
1,1-Dichloroethane	7,900
1,2,4-Trichlorobenzene	10,000
Methylene Chloride	9,900
Tetrachloroethene	110,000

Note: Analytical detection limits at 5,000 ppmv.
Other compounds may have been present < 5,000.

Subsequent investigations led to soil bioremediation, installing ten on-site and four off-site monitoring wells, and an Interim Remedial Measure to extract and treat groundwater. The IRM began operating in June 1998, and is intended to contain the VOC contaminant plume and reduce the concentration of VOCs in the groundwater.

1.2 Prior SVI Investigations

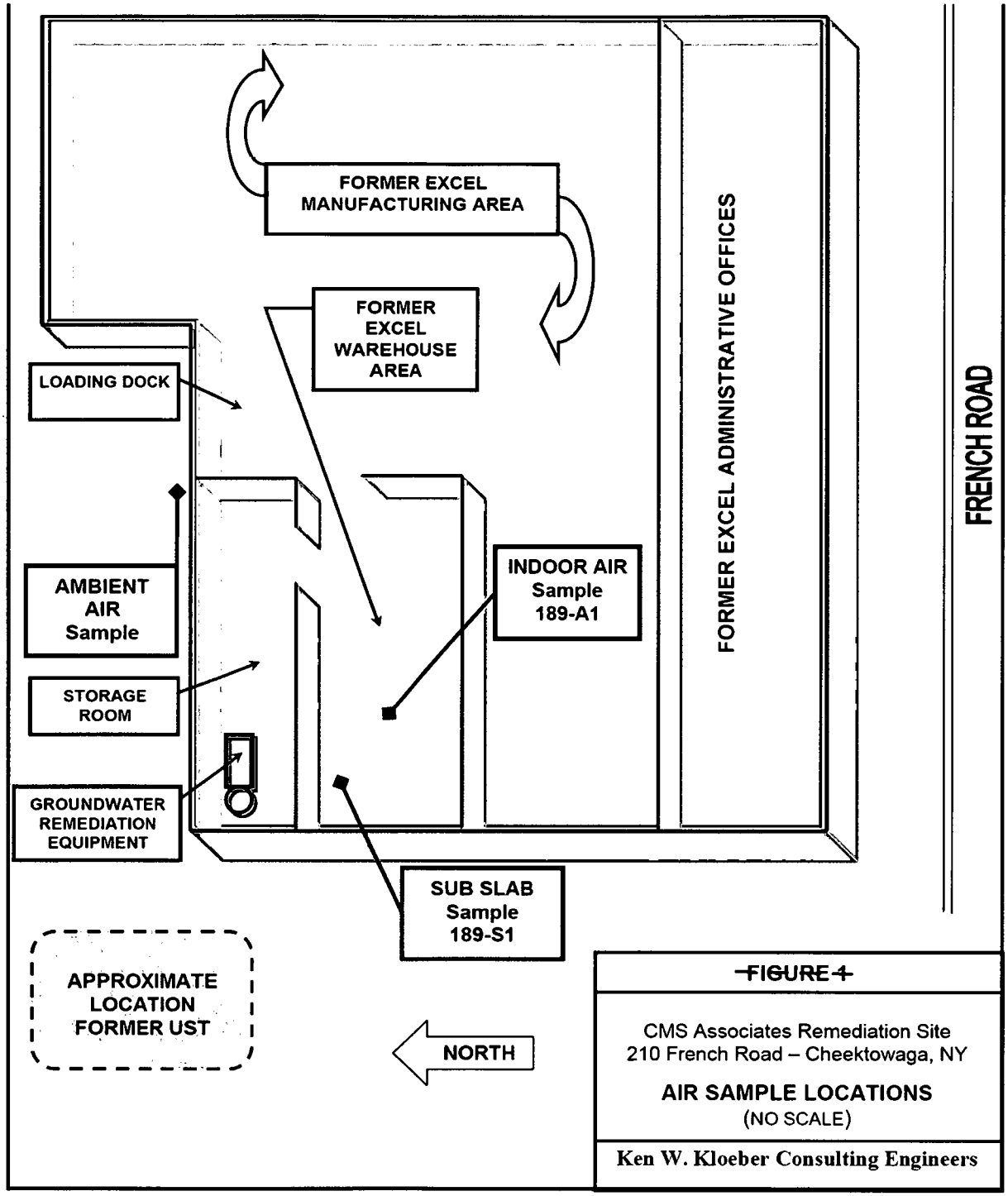
The 210 French Road property was formerly owned by CMS Property Associates, LLC, and was the subject of prior SVI investigations in 2004, 2005, and during the 2010-2011 heating season.

2004 Investigation

In 2004 CMS had a pending agreement to sell the property to Cugini Ventures LLC, and desired to have the site changed from Class 2 to Class 4 on the NYS Registry of Inactive Hazardous Waste Sites. During its review of the reclassification package, the NYSDOH and NYSDEC requested in 2004 that CMS undertake an Air Intrusion Study to determine if volatile organic compounds from the groundwater plume and contaminated bedrock had entered the building envelope.

At that time, the SVI program for inactive hazardous waste sites was in its infancy, and the NYSDOH had not yet issued its *Guidance For Evaluating Soil Vapor Intrusion in the State of New York* (October 2006.) Therefore, the air intrusion investigations in the CMS building were accomplished using then-available information and guidance based on Radon-related studies and residential building mitigation.

Indoor air and sub-slab samples in 2004, led to the NYSDEC and NYSDOH requiring that CMS Property Associates mitigate high VOC sub-slab concentrations in the building (see Figure 2 for sample locations.)



Graphic Source: October 2004 Air Intrusion Study

CMS Associates Remediation Site
Soil Vapor Intrusion Evaluation Work Plan

Figure 2

2004 AIR SAMPLE LOCATIONS

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The sub-slab vapor sample 189-S1 showed the following compounds that were also present in the groundwater monitoring wells:

1,1,1-TCA	3,500 µg/m3
1,1-DCA	27 µg/m3
Benzene	5.0 µg/m3
Chloroform	98 µg/m3
Ethylbenzene	8.8 µg/m3
m-Xylene	23 µg/m3
p-Xylene	8.5 µg/m3
TCE	1.9 µg/m3
Toluene	170 µg/m3

The following seven compounds observed in the indoor air sample 189-A1 were also present in the groundwater monitoring wells:

1,1,1-TCA	4.4 µg/m3
Benzene	1.3 µg/m3
Ethylbenzene	2.6 µg/m3
m-Xylene	6.8 µg/m3
p-Xylene	3.0 µg/m3
Trichlorofluoromethane	1.7 µg/m3
Toluene	7.7 µg/m3

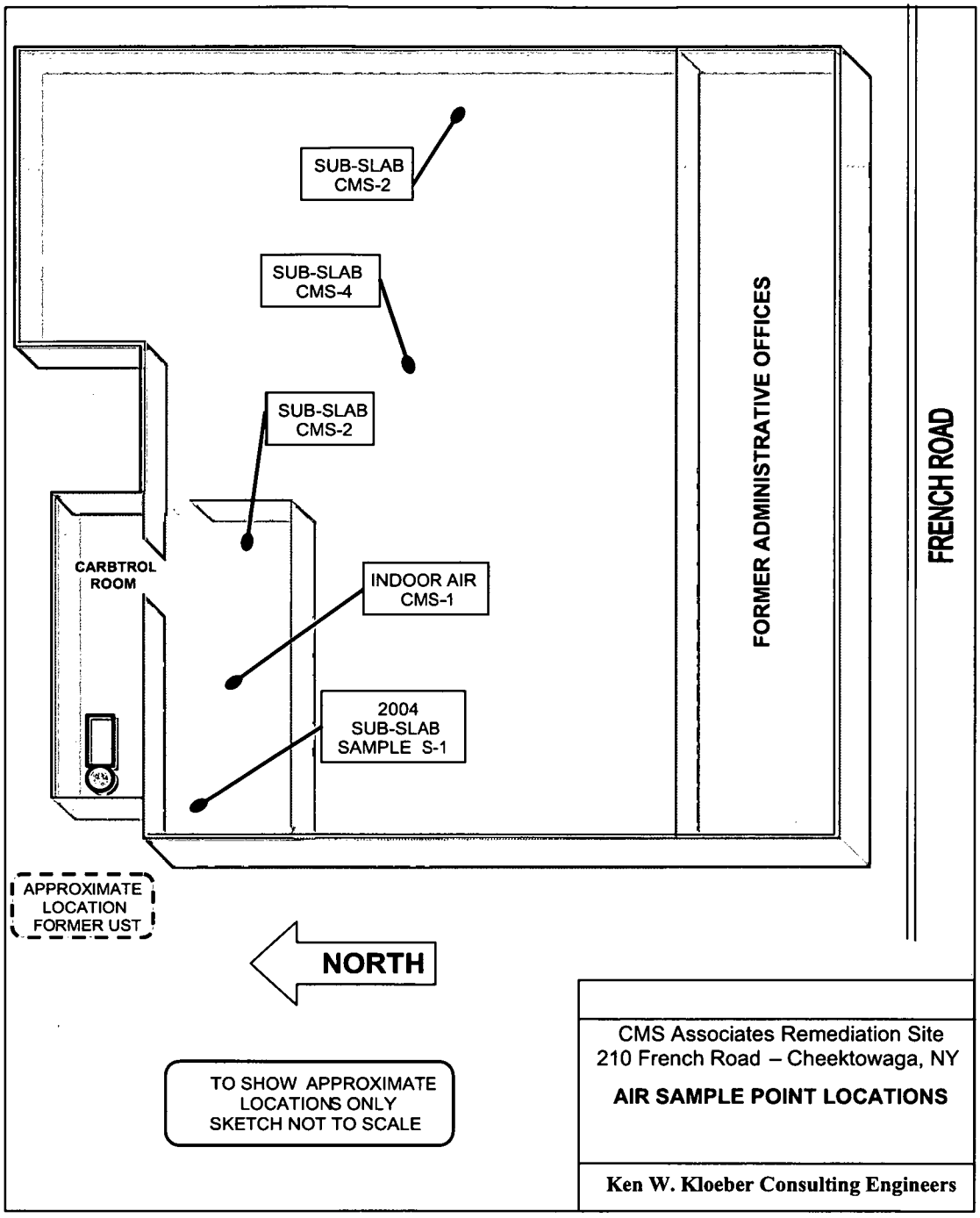
The high concentration of *1,1,1-TCA* in the sub-slab sample indicated that the contaminant plume had migrated under the building slab, the 1,1,1-TCA in the indoor air sample indicates that soil vapor may have subsequently intruded into the building envelope. Because of the high level of *1,1,1-TCA* in sample 189-S1, in December 2004 the NYSDEC required that CMS undertake further investigation to evaluate the soil vapor intrusion potential into the building.

2005 Investigation

In May 2005 a *Soil Vapor Intrusion Work Plan* was prepared and subsequently approved by the NYSDEC and NYSDOH. The NYSDEC also required CMS to install an SVI mitigation system if further testing showed high indoor or sub-slab VOC concentrations.

Initial screening using an HNu OVA identified locations below the floor slab that had potentially high levels of VOCs. Subsequent indoor and sub-slab air sampling in May 2005 showed high concentrations of the following compounds various spots under the floor slab (see Figure 3):

1,1,1-Trichloroethane	0 – 2,600 µg/m3
1,1-Dichloroethane	180 – 22,000 µg/m3
1,1-Dichloroethene	160 – 9,100 µg/m3
Trichloroethene	0 – 900 µg/m3



Graphic Source: May 2005 Air Sampling Plan

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Soil Vapor Intrusion Evaluation Work Plan

Figure 3

2005 AIR SAMPLE LOCATIONS

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The highest VOCs below the floor slab were at samples 189-S1, CMS-3, and CMS-2 (see Figure 3.) Interestingly, sample CMS-4 exhibited lower VOCs, yet is was virtually mid-point between two of the highest readings.

This indicates that the groundwater contaminant plume extended under the building slab, or at least soil vapor from the plume has migrated underneath the concrete slab. According to CMS, the floor was poured upon 4-inches of compacted stone, so there was an opportunity for good communication underneath the slab, barring a significant anomaly in the composition or compaction of the underlying base material. The lower VOCs in sample CMS-4 may indicate such an inconsistency.

No sub-slab vapor communication tests were preformed because it was evident that SVI mitigation was necessary, and that it would likely involve two locations in the building. The approach then, was to install and later use the sub-slab depressurization systems to measure communication across the slab when checking the efficiency of the mitigation through confirmatory air quality testing.

Note also that there was no indoor or sub-slab air testing in the former office area in the south end of the building (see Figure 3.) The reason was that at the time, was that (1) CMS was unsure if Cugini Ventures would conclude the purchase of the building; (2) that the area was not going to be immediately occupied or otherwise used, and (3) Rosina's plans for the building were uncertain. The property was indeed sold in late 2005, and Rosina currently uses the bulk of the floor space to warehouse spare machinery and mechanical parts and equipment, and to store maintenance, cleaning, packaging/shipping, and other non-food supplies.

2010-2011 Heating Season

It involved a year of negotiations after the 2009 Work Plan was approved to gain the property owners' approvals to test the 210 French Road and surrounding buildings, and sub-slab sampling took place over the winter 2010-2011 heating season.

210 French Road Building

There are locations within the 210 French building footprint where sub-slab VOCs exist that are sufficiently high in order to warrant mitigation. In other locations, the sub-slab vapor and indoor air must be sampled and evaluated to determine whether or not mitigation is advisable. It is important to evaluate the building in its totality—in order to determine where mitigation is and is not appropriate—therefore the additional testing proposed will include both sub-slab and concurrent indoor air, along with ambient outdoor sampling.

See Section 2.2 of this Work Plan for a summary and discussion of the 2010-2011 vapor testing at the 210 building.

Surrounding Properties

The initial testing of the sub-slab vapor below the buildings surrounding the CMS Remediation Site indicates that the NYSDOH soil vapor intrusion *SV/Indoor Air Decision Matrix* must be used to evaluate whether mitigation is necessary to address potential soil vapor intrusion. In addition, we believe that the results from the initial sub-slab sample at 1 Scrivner Drive are invalid due to interference from a non-TO-15 compound used as a leak tracer. Therefore the additional testing proposed will include both sub-slab and concurrent indoor air, along with ambient outdoor sampling.

See Section 3.1.1 through 3.1.10 of this Work Plan for a summary and discussion of the 2010-2011 vapor testing at each property.

1.3 Prior SVI Mitigation

As part of the 2005 work, CMS agreed to mitigate high sub-slab VOCs that could potentially affect indoor air quality. To accomplish that, two active sub-slab depressurization systems were installed in late 2005. The first SSDS is on the east (Boxwood Lane) side of the building, with the under-slab suction piping spanning the location of sub-slab air sample CMS-2, with the blower and stack on an interior concrete block dividing wall (see Photo Plate 1.)

The second SSDS is on the west (Rosina Food Products) side of the building, in the area of sub-slab air samples 189-S1 and CMS-2. This system is just southeast of the location of the former leaking UST, and the suction piping extends to the south side of an interior dividing wall between that room and a a parts lock-up cage for Rosina Food Products. The blower and vent stack is on the inside of the building's concrete-block perimeter wall (see Photo Plate 2.)

Trenches for the active sub-slab depressurization piping are nominally two-foot-wide, excavated two-feet below the slab bottom and filled with no. 1 clean, crushed stone. Timers currently operate each system for 2-3 hours a day—which provides an opportunity to dramatically increase the run-time if the SVI Evaluation determines that additional active ventilation is advisable.

CMS Associates Remediation Site
Soil Vapor Intrusion Evaluation Work Plan

Plate 1

SUB-SLAB DEPRESSURIZATION SYSTEM
East Wall of 210 French Building

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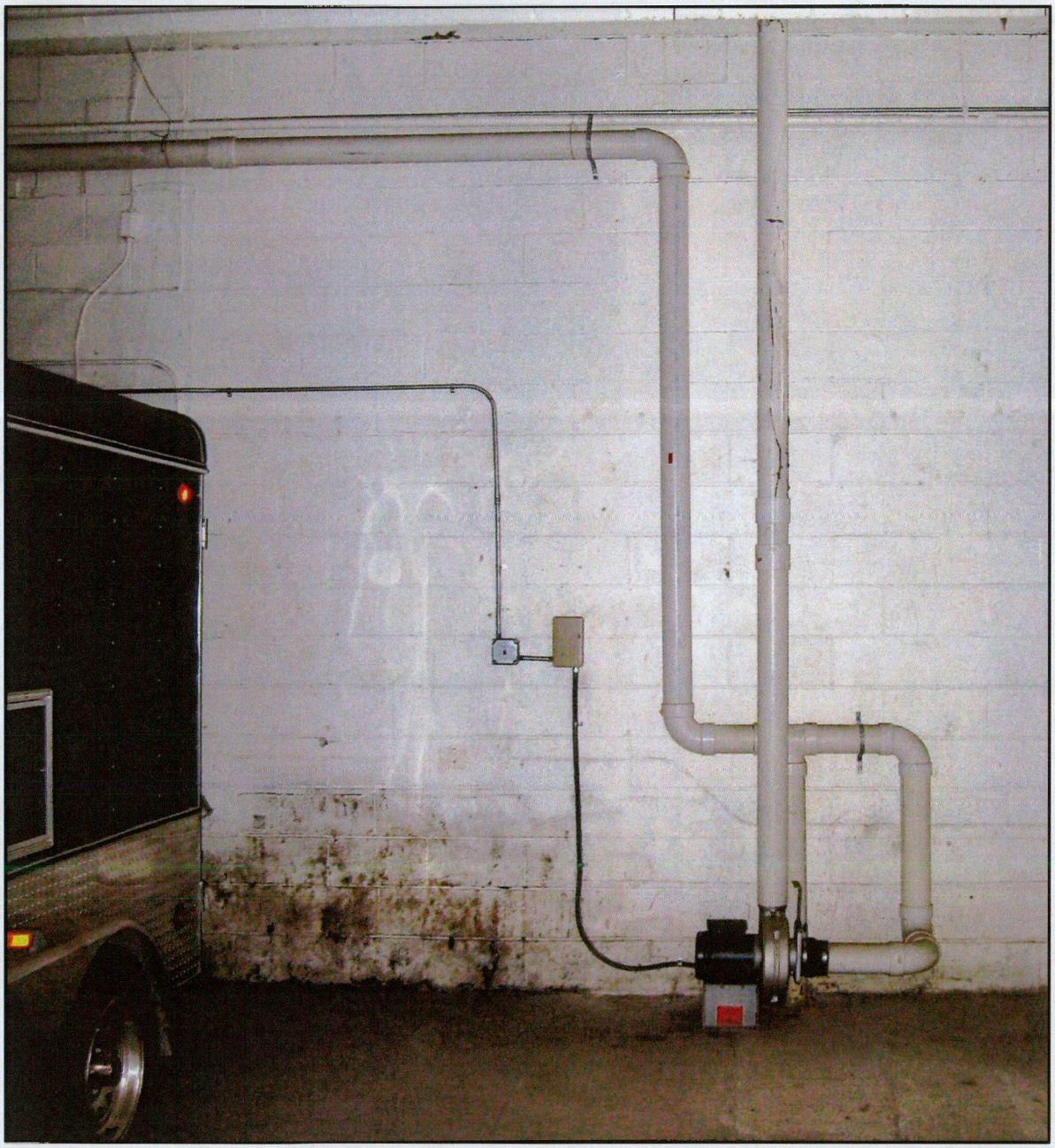

CMS Associates Remediation Site
Soil Vapor Intrusion Evaluation Work Plan

Plate 2

SUB-SLAB DEPRESSURIZATION SYSTEM
West Wall of 210 French Building

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II SVI EVALUATION of 210 FRENCH ROAD BUILDING

2.1 Current Building Conditions

The 210 French Road building encompasses about 45,000 SF of floor area owned by Cuguni Ventures LLC, that the adjacent Rosina Food Products, Inc., currently uses to store equipment and machinery, and non-food items such as cleaning/maintenance and packing/shipping materials. The central part of the warehouse is currently a nearly open structure because Rosina removed some interior walls after CMS sold the building. The east and south portions are former divided offices that are currently vacant or used for light storage.

The only regular occupation is an employee who is typically in the parts cage on the west side of the building. The areas most susceptible to vapor intrusion from the leaking UST were evaluated in May 2005, and active sub-slab depressurization mitigation was subsequently installed in part of that area (see Section 1.3 of this work plan.) Occasionally an additional worker or two will be in the building short term while transferring pallets of packaging or other materials or obtaining supplies/parts.

The southernmost section of the 210 French building—formerly offices for CMS and its tenants—is currently also unoccupied. No prior screening, air tests, or mitigation was performed in this area because it had remained unoccupied before and after CMS sold the building, and the future use of the area was undetermined.

2.2 General Methodology of SVI Evaluation

The original Work Plan was to evaluate only the sub-slab vapor at areas where PID screening indicated potentially high VOCs. This presumed that the two sub-slab depressurization systems would have substantially mitigated the presence of the sub-slab VOC vapors that were previously discovered.

The 2010-2011 tests locations are shown on the floor plan in Appendix, as well as for simplicity, the analytical results for only the six NYSDOH-regulated compounds. There are three types of test locations depicted:

- All test locations shown where screened using a ppb-level ppbRAE 3000 PID.
- Locations in black (e.g. **E**) were screened only—they had low VOC levels and received no sub-slab sampling.
- The 12 locations in red (e.g. **W-s**) had high screening levels and sub-slab vapor was sampled.
- The three underlined locations (i.e. **A-s, D-s, X-s**) designate where sub-slab VOCs reached the threshold requiring mitigation based on the NYSDOH *SV/Indoor Air Decision Matrix.*

All 12 sampled locations exhibited regulated VOCs to varying extents under the floor slab, and comparison to indoor air quality is appropriate to rule out or confirm the need for mitigation, or determine if indoor VOCs are present due to other reason(s).

Although some locations exhibit low VOCs (presumably warranting "*reasonable and practical actions to identify source(s) and reduce exposures*" indoor air sampling (with concurrent outdoor air and sub-

slab resampling) is appropriate to rule out *no further action* or to alternately decide whether action is necessary to identify source(s) and appropriate ways to reduce human exposure. At the same time it would also address the possibility of high indoor VOCs due to other reasons that might affect human health.

In addition, the north central area of the warehouse floor was unavailable for testing in 2010-2011 due to heavy equipment that has since been moved, and will be screened/testing (sub-slab and indoor air.) Additional screening/testing (sub-slab and indoor air) is also proposed in the southeast corner of the building due to high sub-slab VOCs observed nearby and high VOCs at perimeter well MW-14.

2.3 SVI Evaluation Tasks for 210 French

This SVIE will be based on the NYSDOH *Guidance For Evaluating Soil Vapor Intrusion in the State of New York*, published October 2006.

For the SVI evaluation tasks 1. – 7. below:

- The sub-slab screening will be by using a ppb-RAE 3000 PID to obtain a decision-level indication of total VOCs.

- Sub-slab vapor, indoor air, and outdoor ambient air will be sampled using 3L Summa-type canisters with regulators set for 1-hour capture time. Individually certified canisters will be used for indoor and ambient air samples.

- A Helium tracer test will be used before and after each sub-slab sample to confirm reliable samples were obtained with no short-circuiting, and one volume of sample tubing will be purged prior to extracting the sub-slab vapor. Prior to sub-slab sampling the location will be checked with an OmniGuard III or OmniGuard IV to determine if there is a positive, negative, or neutral pressure under the slab.

- Sample analysis will be by an ELAP-certified laboratory (e.g., Centek Labs, Con-Test Labs) using EPA Method TO-15 for VOCs, and the results will be reviewed and assessed—and invalid data will not be used.

- Under-slab air communication tests will be through differential pressure measurements using a Pa-level-sensitivity meter (e.g., OmniGuard III, or OmniGuard IV.)

- A chemical/product inventory (Section 2.11.2, NYSDOH *Guidance*) will be made.

The sequence of the 210 French SVI evaluation will be to:

1. Inspect the building to evaluate its layout and physical interior setting to identify conditions that may affect or interfere with the intended screening and sampling tasks, and to prepare the floor slab for sampling. NYSDOH *Guidance*, Section 2.11.1, will be used as appropriate to document

building interior features and pre-sampling conditions. The prior test locations will be replicated, with additional locations chosen based on the screening results.

2. Screen the sub-slab in the warehouse and former office areas for VOC hot spots to determine the appropriate locations for sub-slab and indoor air tests.

3. Evaluate the remainder of the warehouse floor beyond what was mitigated in 2005. The method will be sub-slab vapor and indoor air testing—with the number and location of samples dependant on the screening—but is expected to involve 10 to 15 sub-slab test locations, and 6 to 9 indoor air samples located to envelop the different conditions in building space (e.g., warehouse open-floor space vs. walled-off segments of the building, chemical storage rooms.)

4. Evaluate the south and southeast office area with sub-slab vapor and indoor air sampling. The number and location of tests will depend on the screening, but is expected to involve 3-5 sub-slab samples and 2-3 indoor air samples.

5. Determine the area of influence of the current SSDS mitigation using air communication tests by differential-pressure measurements with and without the SSDS operating.

6. Determine the effectiveness of the 2005 mitigation through sub-slab and indoor air tests with the SSDS operating to confirm that VOCs are reduced below action levels.

7. Evaluate the sampling results against the NYSDOH *SVI/Indoor Air Decision Matrix* to determine where SVI mitigation is necessary.

2.4 General Mitigation Strategy

The need for SVI mitigation will be determined by evaluating whether sub-slab and indoor air VOCs are above actionable levels using the NYSDOH decision matrix, the expected groundwater/soil cleanup period for the CMS Site, observed and potential SVI pathways, and Rosina Food Products' plans for the building and potential for worker exposure. The SVI Evaluation report will include a strategy that documents the locations of mitigation sites inside the building.

Active sub-slab depressurization is anticipated to be the most cost-effective, efficient, and preferred mitigation, but other methods will be considered. The recommended mitigation would depend on the level of indoor/sub-slab VOCs compared to action-level thresholds, the owner's desires (CMS no longer owns the building, so Rosina Food Products (the operator) and Cugini Ventures LLC (the owner) will need to concur with any proposed mitigation,) and the complexity of/disruption to Rosina's operations in order to install the mitigation. Options such as sealing against VOC entry and modifying the HVAC controls, removing the floor and installing a sub-slab membrane to prevent VOC transfer, and horizontal drilling under the slab may also be viable.

The objectives of the SVI Evaluation in this Work Plan have been developed based on the currently available knowledge of the CMS site conditions, and represents an approach to collect vapor and air samples to evaluate the presence of and potential for future SVI pathways. Changes in site conditions or unexpected problems during sampling may necessitate adjustments to the Work Plan.

III SVI EVALUATION of SURROUNDING PROPERTIES

3.1 Properties Surrounding the CMS Associates Site

Figure 4 shows the CMS Remediation Site at 210 French Road in relation to the surrounding properties and estimated extent of the groundwater contaminant plume. The plume is based on the continued groundwater sampling of on-site and off-site wells. The depicted contamination is an estimate based on the location of the current wells, so the extent shown beyond those is approximate.

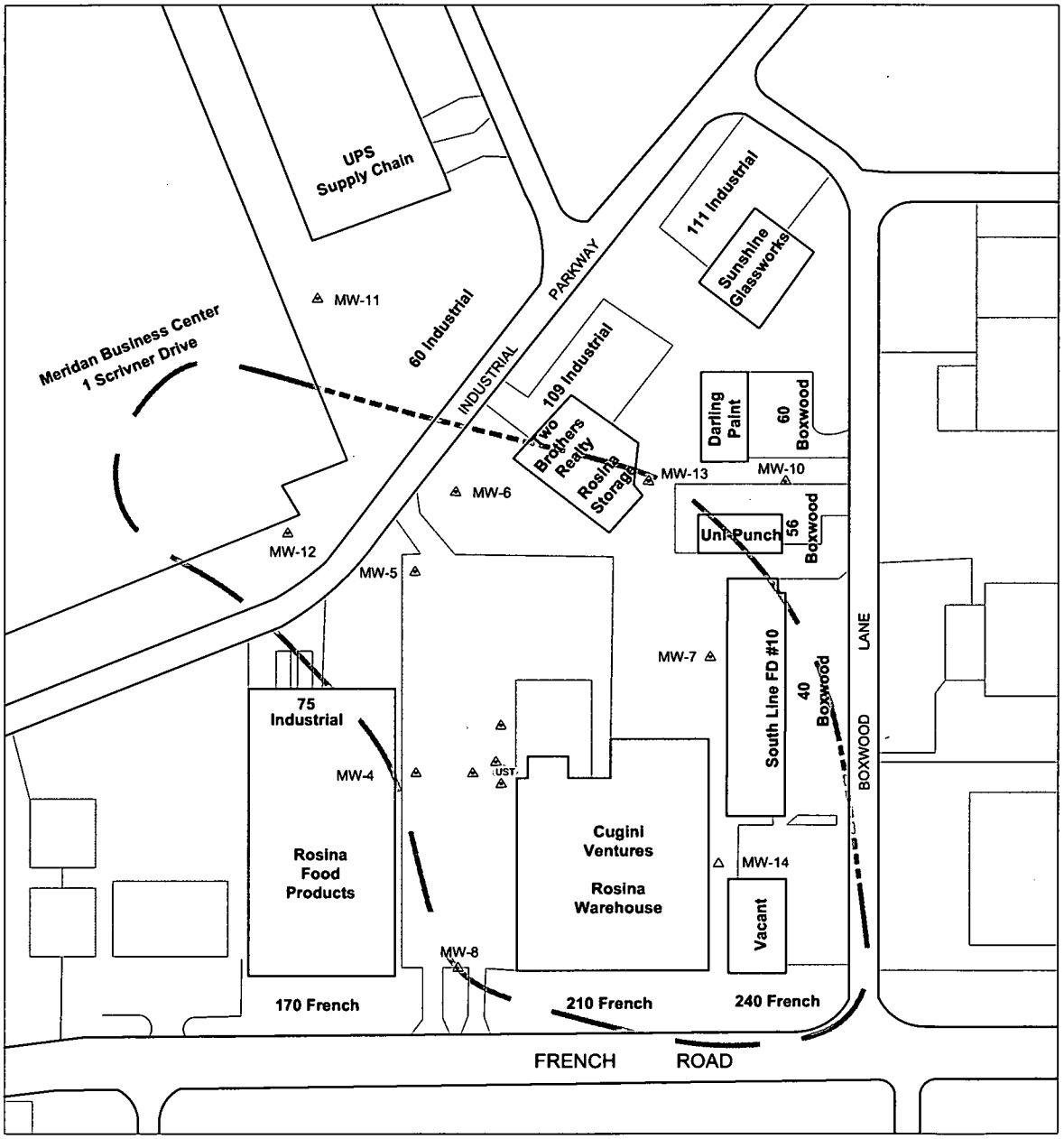
Table 2 shows the properties surrounding the CMS site (clockwise from French Road) and their anticipated likelihood of SVI impact. The rationale on why we chose each specific SVIE methodology is summarized in Section 3.1.1 through Section 3.1.11.

Table 2

Properties Surrounding CMS Associates Remediation Site

Property	Address	Anticipated SVI Impact	Expected SVIE Methodology
Rosina Food Products	170 French	None	No sampling
Rosina Food Products (rear)	75 Industrial	Moderate	Sub-slab PID screening/one air and vapor sample but property owner denied access
Meridan Business Center	1 Scrivner	Low	Sub-slab PID screening/one indoor air and vapor sample, ambient air sampling
UPS / Supply Chain	40 Industrial	None	No sampling
Two Brothers Realty, LLC	109 Industrial	Low	Sub-slab PID screening/one air and vapor sample but property owner denied access
Sunshine Glassworks	111 Industrial	None	No sampling
Darling Paint	60 Boxwood	None	No sampling
Uni-Punch	56 Boxwood	Moderate	Sub-slab PID screening/one air and vapor sample, ambient air sampling
South Line Fire Co. #10	40 Boxwood	Moderate	Sub-slab PID screening/one air and vapor sample, ambient air sampling
Vacant warehouse	240 French	Low	Sub-slab PID screening/one air and vapor sample, ambient air sampling

Each property in Table 2 is assigned an anticipated potential for SVI impact based on its proximity to the former leaking UST, its relationship to regional groundwater migration (generally toward the north-northwest), the effectiveness of the IRM as indicated by the continued sampling of on- and off-site monitoring wells, and the VOC compounds found in the groundwater wells. In addition, some compounds of higher concern and concentration—as indicated by the tested contents of the leaking UST and the initial groundwater sampling—have likely degraded over time to their daughter compounds.



Notes:

UST *Former UST Location*

Groundwater Monitoring Well

Locations of structures are approximate

Extent of groundwater contaminant plume is based on available information and is an estimate only

N

0 100
Approx Feet

CMS Associates Remediation Site
Soil Vapor Intrusion Evaluation Work Plan

Figure 4

Properties Surrounding CMS Site

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If the results of off-site SVI sampling reveals sub-slab VOCs that were or are currently present in groundwater on the CMS site, additional investigation may be necessary for the SVIE report in order to to rule out other sources of contamination. The surrounding area is industrial/commercial, and though unlikely, there could be other sole or contributing source(s) of soil-vapor or groundwater VOCs.

The relationship of each property to the above is summarized below:

3.1.1 170 French Road (no anticipated SVI impact—no testing proposed)

Results of the IRM, as evidenced by sampling at on-site monitoring well MW-8, indicates that the southern portion of the Rosina Food Products building would have no anticipated SVI impact.

Regional groundwater movement is away from MW-8, and the highest level of total VOCs was 282 µg/l in 1999—which the IRM has reduced to as low as ~35 µg/l in April 2011 sampling—including *Dichloroethane* (11 µg/l) and *cis-1,1-Dichloroethene* (12 µg/l,) and Vinyl Chloride (11 µg/l.) Groundwater VOC concentrations do not necessarily correlate to sub-slab VOC vapor concentrations, but both the initial and current VOC levels indicate that SVI impact is not anticipated at the 170 French Road building.

3.1.2 75 Industrial Parkway (anticipated moderate potential for SVI impact—testing proposed, but property owner denied access)

This building is the rear (north) portion of the Rosina Food Products manufacturing facility and contains the security and other offices, and the employee break room. SVI testing was proposed in the 2009 Work Plan due to the rationale presented below, but Rosina Food Products declined access. Therefore no testing is proposed in this modified Work Plan, and the denial of access has previously been provided to the NYSDEC, will be documented in the final SVIE Report.

Sampling two months after removing the leaking UST showed that perimeter monitoring well MW-4 contained a high level of *1,1,1-Tricholorethane* (~20,000 µg/l)—which for unknown reasons has not reappeared. The *1,1,1-TCA* may have been due to cross-contamination or possibly been misidentified during analysis due to interferences with other compounds (the lab report does not indicate the analysis detection limit.) Sampling at MW-4 before the IRM began operating indicated total VOCs of ~600 ug/l—the highest compounds being *Benzene* (120 µg/l,) *Toluene* (230 µg/l), and *Xylenes* (229 µg/l.) The total VOCs at MW-4 have consistently been at or below ~50 µg/l since 2006, and are often below ~10 µg/l.

The 75 Industrial Parkway building is ~25 feet from MW-4 and ~120 feet from the former leaking UST, and the micro-gradient of the groundwater surface on the CMS site proper indicates flow can at times be toward Rosina (as evidenced by prior groundwater elevations of on-site wells.) Those conditions indicate that the plume likely extended beneath the Rosina building, although possibly for a short distance.

Although groundwater VOC levels do not necessarily correlate to sub-slab vapor concentrations, the site conditions coupled with the possibility that MW-4 contained high *1,1,1-TCA*, suggest a moderate potential for SVI impact at the rear (north) portion of the Rosina Food Products building.

3.1.3 1 Scrivner Drive (anticipated low potential for SVI impact—testing proposed)

The Meridan Business Center is a 450,000-SF warehouse/distribution center north of Industrial Parkway. The southeastern-most corner of the facility is ~140 feet northwest of on-site monitoring well MW-5, which has contained high total VOCs after the IRM was instituted (~1,500 to ~3,000 µg/l.) After removing the leaking UST, MW-5 contained high total VOCs, including *1,1,1-TCA* (8,900 µg/l,) *1,1-DCA* (3,300 µg/l,) and *cis-1,2-DCE* (790 µg/l.)

The regional groundwater movement being toward the building, coupled with the high initial VOCs at MW-5, suggests that the contaminant plume may have extended underneath at least the southeastern portion of the floor slab (nearest Industrial Parkway.)

The IRM has reduced the initial high total VOCs at MW-5 (12,990 µg/l) to or below ~1,000 µg/l, and the *1,1,1-TCA* has been eliminated or has degraded into associated daughter compounds. In addition, during the 2010-2011 SVI sampling, in fall 2010 the new off-site well MW-12 was installed adjacent to the building, and that well exhibits total VOCs in the range of 126 µg/l to 560 µg/l.

Although groundwater VOCs at MW-5 and MW-12 do not necessarily correlate to soil vapor or sub-slab VOC concentrations, the site conditions coupled with the apparent elimination of *1,1,1-TCA* indicates a low potential for SVI impact at this building.

Sub-slab vapor testing was proposed in the 2009 Work Plan, and was completed in 2010, but there was interference with the GC/MS from 1,1-Difluoroethane (R-152a or "canned air") that was used for leak tracing, as required by an adjacent property owner as a condition of allowing access for testing. The analytical results showed non-detection for regulated VOCs, but the interference required raising the detection limits to the point where the results are unusable for the purpose of the NYSDOH *SV/Indoor Air Decision Matrix* (the sample was diluted 142 times—see table of results below). Therefore, this site should be retested (sub-slab, indoor air, outdoor air) during the second round of sampling.

CAS	Compound	Data Qualifiers	Dilution Factor	EPA Method TO-15 Results µg/m3 Concentration	µg/m3 Practical Quantitation Limit	ppbVolume Concentration	ppbVolume Practical Quantitation Limit	*Tentative recommendation based on NYSDOH Soil Vapor/Indoor Air Matrix 1 and Matrix 2*
	1 Scrivner Drive **Truck Terminal / Warehouse** Southeast corner **Sub-slab Vapor Sample** **Sample 189-04-1** **Mon Nov 15, 2010**							
56-23-5	Carbon tetrachloride		**142**	nd	180	nd	28	***Resample (SSV, IA, OA)***
79-01-6	Trichloroethene		**142**	nd	150	nd	28	***Resample (SSV, IA, OA)***
75-01-4	Vinyl chloride		**142**	nd	73	nd	28	***Resample (SSV, IA, OA)***
71-55-6	*1,1,1-Trichloroethane*		**142**	nd	160	nd	28	***Resample (SSV, IA, OA)***
75-35-4	1,1-Dichloroethene		**142**	nd	110	nd	28	***Resample (SSV, IA, OA)***
156-59-2	cis-1,2-Dichloroethene		**142**	nd	110	nd	28	***Resample (SSV, IA, OA)***
127-18-4	*Tetrachloroethene*		**142**	nd	190	nd	28	***Resample (SSV, IA, OA)***

Note that limits were raised due to interference from non-TO-15 (leak tracer) compound

Key to Compound List

All above are found in CMS wells

italic = found in LUST contents

underlined = in soil surrounding LUST

3.1.4 **60 Industrial Parkway** (no anticipated SVI impact—no testing proposed)

This 41,000-SF building is a distribution center north of Industrial Parkway that is ~ 60 feet north of off-site monitoring well MW-11 and ~580 feet from the former leaking UST.

All sampling at MW-11 shows no groundwater VOCs, which indicates that the contaminate plume has not travelled that far north. Therefore, no SVI impact is anticipated at this building.

3.1.5 **109 Industrial Parkway** (anticipated low potential for SVI impact—testing proposed but property owner denied access.)

This is a 9,300-SF building is used by Rosina Food Products for storage and there is no employee occupation. It is ~115 feet east of on-site monitoring well MW-6, which had total VOCs in the range 86 - 277 µg/l prior to instituting the IRM. Its primary groundwater VOCs were *1,1-DCA* (10 – 66 µg/l,) *cis-1,2-DCE* (24 – 76 µg/l,) *Toluene* (1 – 34 µg/l,) and *Xylenes* (11 –125 µg/l.) The IRM has reduced total VOCs at MW-6 to the range ~20 to ~40 µg/l.

The level of VOCs at MW-6 after removing the leaking UST suggests a low potential for SVI impact. However, local groundwater movement is generally northerly, which places 109

Industrial in a path from the former leaking UST location. Additionally, high VOCs at MW-5 and MW-7 suggest localized transmission paths due to bedrock fractures and bedding planes.

For these reasons, we initially anticipated a moderate potential for soil vapor intrusion at the 109 Industrial Parkway building. However, during the initial 2010-2011 SVI testing, in fall 2010 off-site well MW-13 was installed adjacent to the east side of the building—and it generally exhibits low total groundwater VOCs (2 – 86 µg/l). For this reason we revised the anticipated SVI impact from moderate to low at this location.

Initial sub-slab vapor testing indicated that the building should be retested (sub-slab, indoor air, outdoor air) to use the NYSDOH *SV/Indoor Air Decision Matrix* to evaluate vapor intrusion. The analytical results of the 2010 sub-slab test is not presented herein because permission to release and discuss the data are the subject of ongoing discussions between CMS and the property owner, Two Brothers Realty LLC. Concurrent indoor air and sub-slab testing was proposed for the follow-up work, but the property owner declined access for additional testing. Therefore no testing is proposed in this modified Work Plan, and the denial of access will be documented in the final SVIE Report.

3.1.6 **111 Industrial Parkway** (no anticipated SVI impact—no testing proposed)

This is a 10,600-SF building at the corner of Boxwood Lane that houses Sunshine Glassworks—a retail and wholesale specialty stained-glass business, which employees reportedly occupy on weekdays during the summer, and additionally Saturdays during fall/winter/spring. It is located ~550 feet northeast of the former leaking UST, and due north of off-site monitoring well MW-10—which has been free of groundwater VOCs.

Given its distance from the UST, the general direction of groundwater movement, lack of groundwater VOCs at MW-10, and low VOCs at MW-13, we anticipate no SVI impact at this building.

3.1.7 **60 Boxwood Lane** (no anticipated SVI impact)

This 5,000-SF building houses Darling Paint, a contract commercial painting company. It is ~400 feet northeast of the former leaking UST and directly north of off-site monitoring well MW-10. Based on the regional direction of groundwater movement and lack of groundwater VOCs at MW-10, the contaminant plume appears not to have reached this building, and therefore no SVI impact is anticipated.

3.1.8 **56 Boxwood Lane** (anticipated moderate potential for SVI impact)

This is a 3,500-SF building with a few employees of Uni-Punch Products who prepare trade show displays and other low-volume fabrications. It is directly south of off-site monitoring well MW-10, and ~120 feet north of perimeter well MW-7.

After removing the leaking UST, MW-7 contained high *1,1-DCA* (~2,000 ug/l)—which the IRM has not significantly reduced—and *1,2-DCA* (~100 ug/l).

Although MW-10 consistently shows no groundwater VOCs and no *TCE* appears in MW-7, the building's proximity to, and lack of significant reduction of VOCs at, that well suggests that the plume may have migrated under the floor slab at 56 Boxwood, and therefore the anticipated potential is moderate for SVI impact.

Sub-slab vapor testing was proposed in the 2009 Work Plan, and was completed in fall 2010. The result showed low level *1,1,1-TCA* (see table below,) and that the building should be retested (sub-slab, indoor air, outdoor air) to utilize the NYSDOH *SV/Indoor Air Decision Matrix.*

56 Boxwood Lane **Office / Warehouse** Warehouse; southwest corner **Sub-slab Vapor Sample** **Sample 189-04-56** **Fri Nov 12, 2010** **CAS**	**Compound**	Data Qualifiers	**EPA Method TO-15 Results**						*Tentative recommendation based on NYSDOH Soil Vapor/Indoor Air Matrix 1 and Matrix 2*
				µg/m3		ppbVolume			
			Dilution Factor	**Concentration**	Practical Quantitation Limit	Concentration	Practical Quantitation Limit		
56-23-5	Carbon tetrachloride		1	nd	1.3	nd	0.20		***No further action***
79-01-6	Trichloroethene		1	nd	1.1	nd	0.20		***No further action***
75-01-4	Vinyl chloride		1	nd	0.52	nd	0.20		***No further action***
71-55-6	*1,1,1-Trichloroethane*		1	**4.9**	1.1	**0.88**	0.20		***Resample (SSV, IA, OA)***
75-35-4	1,1-Dichloroethene		1	nd	0.81	nd	0.20		***Resample (SSV, IA, OA)***
156-59-2	cis-1,2-Dichloroethene		1	nd	110	nd	0.20		***Resample (SSV, IA, OA)***
127-18-4	*Tetrachloroethene*		1	nd	1.4	nd	0.20		***No further action***

Key to Compound List

All above are found in CMS wells

italic = found in LUST contents

underlined = in soil surrounding LUST

Although the sub-slab exhibits low levels of regulated VOCs (presumably warranting "*reasonable and practical actions to identify source(s) and reduce exposures*") retesting is appropriate to rule out *no further action,* or alternately to decide whether action is necessary to identify source(s) and appropriate ways to reduce human exposure. At the same time it would also address the possibility of high indoor VOCs due to other reasons that might affect human health.

3.1.9 **40 Boxwood Lane** (anticipated moderate potential for SVI impact)

This is the location of the Cheektowaga South Line Fire District #10 substation, which was reconstructed and enlarged to 14,300 SF in 2007(?)—and is 15 feet east of perimeter monitoring well MW-7 and ~140 feet east of the former leaking UST. The proximity to MW-7 with its initial high VOCs suggests that the contaminant plume extends under the footprint of the reconstructed building.

The general contractor for the reconstruction reported that a vapor barrier was installed under the slab to minimize vapor being transmitted into the building—but the Architect reports that the barrier was 6-mil polyethylene, which is considered insufficient for preventing soil vapor intrusion.

MW-7 remains high in groundwater VOCs (see Section 3.1.8, above) but no *TCE* appears in the samples. Until the details of the sub-slab vapor barrier mitigation can be evaluated, the anticipated potential is moderate for SVI impact.

Sub-slab vapor testing was proposed in the 2009 Work Plan, which was done in fall 2010 and spring 2011. The result showed regulated VOCs below the floor (see table below.) Note that the lab needed to dilute the sample due to interference with the GC/MS from 1,1-Difluoroethane (R-152a or "canned air") that was required by an adjacent property owner as a condition of allowing access for testing. Nevertheless, results showed regulated VOCs to the point where the building should be retested (sub-slab, indoor air, outdoor air) for the purpose of using the NYSDOH *SV/Indoor Air Decision Matrix.*

40 Boxwood Lane		**EPA Method TO-15 Results**						
South Line Fire District No. 10				µg/m3		ppbVolume		
Generator room								
Sub-slab Vapor Sample								
Sample 189-04-40-S								
Sat Nov 20, 2010		Data Qualifiers	Dilution Factor	**Concentration**	Practical Quantitation Limit	Concentration	Practical Quantitation Limit	*Tentative recommendation based on NYSDOH Soil Vapor/Indoor Air Matrix 1 and Matrix 2*
CAS	**Compound**							
56-23-5	Carbon tetrachloride		13.65	nd	17	nd	2.7	***No further action***
79-01-6	Trichloroethene		13.65	**17**	15	**3.1**	2.7	***Resample (SSV, IA, OA)***
75-01-4	Vinyl chloride		13.65	nd	7	nd	2.7	***No further action***
71-55-6	*1,1,1-Trichloroethane*		13.65	**100**	15	**18**	2.7	***Resample (SSV, IA, OA)***
75-35-4	1,1-Dichloroethene		13.65	nd	11	nd	2.7	***No further action***
156-59-2	cis-1,2-Dichloroethene		13.65	nd	11	nd	2.7	***No further action***
127-18-4	*Tetrachloroethene*		13.65	**39**	19	**5.7**	2.7	***Resample (SSV, IA, OA)***

Note that limits were raised due to interference from non-TO-15 (leak tracer) compound

Due to the interference, a second sample was taken in a different location that PID screening indicated had high sub-slab VOCs. The sample also exhibited regulated VOCs (see table below,) albeit at lower concentrations.

40 Boxwood Lane
South Line Fire District
No. 10
Compressor room

Sub-slab Vapor Sample
Sample 189-04-40-S2

Fri Feb 4, 2011

CAS	Compound	Data Qualifiers	Dilution Factor	EPA Method TO-15 Results µg/m3 Concentration	µg/m3 Practical Quantitation Limit	ppbVolume Concentration	ppbVolume Practical Quantitation Limit	*Tentative recommendation based on NYSDOH Soil Vapor/Indoor Air Matrix 1 and Matrix 2*
56-23-5	Carbon tetrachloride		1	nd	1.30	nd	0.20	***No further action***
79-01-6	Trichloroethene		1	**1.8**	1.10	**0.33**	0.20	***Resample (SSV, IA, OA)***
75-01-4	Vinyl chloride		1	nd	0.52	nd	0.20	***No further action***
71-55-6	*1,1,1-Trichloroethane*		1	**1.7**	1.10	**0.3**	0.20	***Resample (SSV, IA, OA)***
75-35-4	*1,1-Dichloroethene*		1	**1.5**	0.81	**0.36**	0.20	***Resample (SSV, IA, OA)***
156-59-2	cis-1,2-Dichloroethene		1	nd	0.81	nd	0.20	***No further action***
127-18-4	*Tetrachloroethene*		1	**3.6**	1.40	**0.52**	0.20	***Resample (SSV, IA, OA)***

Key to Compound List

All above are found in CMS wells

italic = found in LUST contents

underlined = in soil surrounding LUST

The results of the prior sub-slab sampling indicate that retesting (sub-slab, indoor air, outdoor air) is appropriate to apply the NYSDOH *SV/Indoor Air Decision Matrix*. The indoor air sample would be obtained in the employee break room or exercise room since human occupation is rare in the apparatus bays, and overhead doors are naturally opened when the fire district responds to a call. The other rooms would be more critical regarding human health issues.

3.1.10 240 French Road (anticipated moderate potential for SVI impact)

This 5,800-SF building is a vacant warehouse that formerly housed Comairco Equipment, a supplier of industrial paint spraying equipment, air compressors, blowers, and vacuum pumps. It is on the corner of Boxwood Lane, ~25 feet from the east side of the 210 French building and ~270 feet southeast of the former leaking UST.

The 210 French building had very high sub-slab total VOCs (~30,000 ug/l) on its east side when tested in 2005 (see sample point CMS-2 on Figure 3 in Work Plan Section 1.2.) Additionally, after the initial SVI testing a new perimeter well MW-14 was installed near the northwest corner of the 240 French building in spring 2011 and it exhibits VOCs (~3,600 – 8,000 µg/l.) This suggests that the plume extends onto the 240 French Road building footprint and we anticipate that the anticipated SVI impact is moderate at that location.

Sub-slab vapor testing was proposed in the 2009 Work Plan, and was completed in fall 2011. The result showed regulated VOCs below the floor slab (see table below.)

240 French Road **Office / Warehouse** Warehouse; northwest corner **Sub-slab Vapor Sample** **Sample 189-04-240** **Thu Jan 27, 2011**			**EPA Method TO-15 Results**				
			µg/m3		ppbVolume		
CAS **Compound**	Data Qualifiers	Dilution Factor	**Concentration**	Practical Quantitation Limit	Concentration	Practical Quantitation Limit	*Tentative recommendation based on NYSDOH Soil Vapor/Indoor Air Matrix 1 and Matrix 2*
56-23-5 Carbon tetrachloride		1	nd	1.3	nd	0.20	***No further action***
79-01-6 Trichloroethene		1	nd	1.1	nd	0.20	***No further action***
75-01-4 Vinyl chloride		1	nd	0.52	nd	0.20	***No further action***
71-55-6 *1,1,1-Trichloroethane*		1	**3.9**	1.1	**0.71**	0.20	***Resample (SSV, IA, OA)***
75-35-4 1,1-Dichloroethene		1	nd	0.81	nd	0.20	***No further action***
156-59-2 cis-1,2-Dichloroethene		1	nd	0.81	nd	0.20	***No further action***
127-18-4 *Tetrachloroethene*		1	**3.4**	1.4	**0.49**	0.20	***Resample (SSV, IA, OA)***

Key to Compound List

All above are found in CMS wells

italic = found in LUST contents

underlined = in soil surrounding LUST

Although the sub-slab vapor exhibits low VOCs (presumably warranting "*reasonable and practical actions to identify source(s) and reduce exposures,*" retesting (sub-slab, indoor air, outdoor air) is appropriate to rule out *no further action* or alternately to decide whether it is necessary to identify source(s) and appropriate ways to reduce human exposure. At the same time it would also address the possibility of high indoor VOCs due to other reasons that in the future might affect human health.

3.2 General Methodology to Evaluate Surrounding Properties

The most effective way to evaluate SVI at the surrounding properties is through sub-slab screening, and sub-slab and indoor air tests. However, the various buildings are not controlled by CMS Property Associates LLC, and it has no right to enter or test for SVI. A similar situation existed when off-site monitoring wells MW-10 and MW-11 were installed in 1998, and MW-13 and MW-14 were installed in fall 2010 and spring 2011. Therefore, property owners have been approached to obtain permission for the follow-up testing, and only the owner of 109 Industrial has declined the offer for indoor air and sub-slab sampling. Property owners who decline the testing will be appropriately documented in the SVIE report.

The approach of this follow-up evaluation of the surrounding properties will follow the sequence below.

3.3 SVI Evaluation Tasks for Surrounding Properties

This SVIE will be based on the NYSDOH *Guidance For Evaluating Soil Vapor Intrusion in the State of New York*, published October 2006.

For the SVI evaluation tasks 1. – 4. below:

- The sub-slab and indoor air screening will be by using a ppb-RAE 3000 PID to obtain an indication of total VOCs.

- Sub-slab vapor, indoor air, and outdoor ambient air will be sampled using 3L Summa-type canisters with regulators set for 1-hour capture time. Individually certified canisters will be used for indoor and ambient air samples.

- A Helium gas tracer test will be used before and after each sub-slab sample to confirm reliable samples were obtained with no short-circuiting, and one volume of sample tubing will be purged prior to extracting the sub-slab vapor. Prior to sub-slab sampling the location will be checked with an OmniGuard III or OmniGuard IV to determine if there is a positive, negative, or neutral pressure under the slab.

- Sample analysis will be by an ELAP-certified laboratory (e.g., Centek Labs, Con-Test Labs) using EPA Method TO-15, and the results will be reviewed and assessed—and invalid data will not be used.

- A chemical/product inventory (Section 2.11.2, NYSDOH *Guidance*) will be made.

The sequence of the evaluation at each off-site property will be to:

1. Inspect the building to evaluate its layout and physical interior setting to identify conditions that may affect or interfere with the intended screening and sampling tasks, and to prepare the floor slab for sampling. NYSDOH *Guidance*, Section 2.11.1, will be used to document building interior features and pre-sampling conditions.

2. Screen the sub-slab and indoor air at the location for total VOCs prior to obtaining indoor air and sub-slab samples.

3. Sample sub-slab vapor and indoor air at each building having an anticipated low to moderate potential for SVI impact. Buildings with no anticipated SVI impact will not be sampled.

4. Evaluate the results against the NYSDOH *SVI/Indoor Air Decision Matrix* to determine if SVI mitigation is necessary.

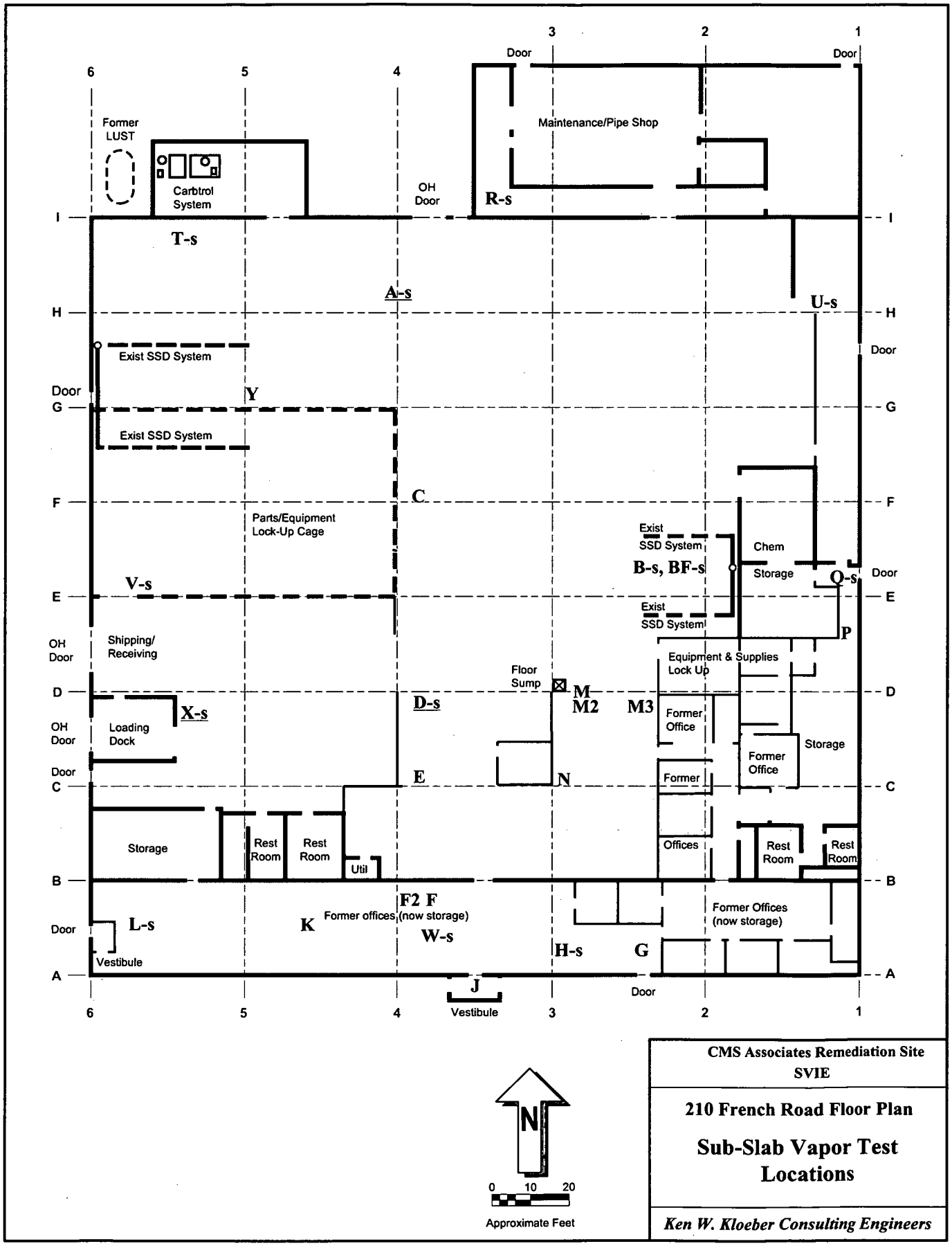
3.4 General Mitigation Strategy for Off-Site Buildings

The need for mitigation at any of the surrounding properties/buildings will be determined by evaluating the presence of sub-slab VOCs and whether they are above actionable levels, the expected groundwater/soil cleanup period for the CMS site, observed and potential SVI pathways, and the future plans for each building and associated potential human exposure. However, if the SVI Evaluation reveals sub-slab VOCs that were or are currently present in groundwater on the CMS Site, they may not necessarily be due to the former leaking UST. Further investigation might be necessary to rule out other sources of contamination since the area surrounding the CMS Site is industrial/commercial, and there could be other sole or contributing source(s) of soil-vapor or groundwater VOCs.

If mitigation is needed, the SVI Evaluation report will include a general strategy (versus detailed engineering design) that documents the recommended approach for each building. Active sub-slab depressurization is initially anticipated to be the cost-effective and most-efficient mode, but other appropriate methods will be considered. Any mitigation will need to be agreed to by the building/site owners.

The primary objectives of the SVI Evaluation outlined in this Work Plan were developed based on currently available knowledge of the CMS site conditions and conditions at each off-site property, and represents the general approach to collect vapor and air samples to evaluate the presence of and potential for future SVI pathways. Unexpected or changed site conditions may require adjustments to the Work Plan.

APPENDIX



CMS Associates Remediation Site
SVIE

210 French Road Floor Plan

Sub-Slab Vapor Test Locations

Ken W. Kloeber Consulting Engineers

EPA Method TO-15 Results
(after existing SSD oprerating normally)

Printed
Wed Apr 24, 2013

210 French Road
Test location A
Warehouse; north-center (Column H.2-4)
Sub-slab Vapor Sample
Sample 189-04-210A-S
Thu Dec 16, 2010

CAS	Compound	Data Qualifiers	Dilution Factor	µg/m³ Concentration	µg/m³ Practical Quantitation Limit	ppbVolume Concentration	ppbVolume Practical Quantitation Limit	*Tentative recommendation based on NYSDOH Soil Vapor/Indoor Air Matrix 1 and Matrix 2*
56-23-5	Carbon tetrachloride		1	nd	1.3	nd	0.20	***No further action***
79-01-6	Trichloroethene		1	**230**	1.1	**42**	0.20	***Resample (SSV, IA, OA)***
75-01-4	Vinyl chloride		1	nd	0.5	nd	0.20	***No further action***
71-55-6	*1,1,1-Trichloroethane*		147	**1000**	160	**190**	29	***Mitigate***
75-35-4	1,1-Dichloroethene		1	**1.6**	0.81	**0.40**	0.20	***Resample (SSV, IA, OA)***
156-59-2	*cis-1,2-Dichloroethene*		1	**4.1**	0.81	**1.0**	0.20	***Resample (SSV, IA, OA)***
127-18-4	*Tetrachloroethene*		147	**11000**	200	**1600**	29	***Mitigate***

nd = not detected at the Practical Quantitation Limit

Key to Compound List
All above are found in CMS wells
italic = found in LUST contents
underlined = in soil surrounding LUST

Data Qualifiers
Some reporting limits were raised due to high target compounds
E Value above quantitation range
J Analyte detected below quantitation limit
Q Outlying QC recoveries were associated with this analyte
B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
S Spike Recovery outside accepted recovery limits

EPA Method TO-15 Results
(after existing SSD oprerating normally)

Printed
Wed Apr 24, 2013

210 French Road
Test location B
Warehouse; center-east (Column E.4-2.4)
Sub-slab Vapor Sample
Sample 189-04-210B-S
Wed Dec 15, 2010

CAS	Compound	Data Qualifiers	Dilution Factor	µg/m³ Concentration	µg/m³ Practical Quantitation Limit	ppbVolume Concentration	ppbVolume Practical Quantitation Limit	*Tentative recommendation based on NYSDOH Soil Vapor/Indoor Air Matrix 1 and Matrix 2*
71-55-6	Carbon tetrachloride		1	nd	1.3	nd	0.20	***No further action***
79-01-6	Trichloroethene		1	**130**	1.1	**24**	0.20	***Resample (SSV, IA, OA)***
75-01-4	Vinyl chloride		1	**4.8**	0.52	**1.8**	0.20	***Resample (SSV, IA, OA)***
79-34-5	*1,1,1-Trichloroethane*		1	**17**	1.1	**3.1**	0.20	***Resample (SSV, IA, OA)***
75-35-4	1,1-Dichloroethene		5	**1000**	4	**260**	1.0	***Resample (SSV, IA, OA)***
156-59-2	cis-1,2-Dichloroethene		1	**67**	0.81	**17**	0.20	***Resample (SSV, IA, OA)***
127-18-4	*Tetrachloroethene*		1	**6.4**	1.4	**0.93**	0.20	***Resample (SSV, IA, OA)***

nd = not detected at the Practical Quantitation Limit

Key to Compound List
All above are found in CMS wells
italic = found in LUST contents
underlined = in soil surrounding LUST

Data Qualifiers
Some reporting limits were raised due to high target compounds
E Value above quantitation range
J Analyte detected below quantitation limit
Q Outlying QC recoveries were associated with this analyte
B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
S Spike Recovery outside accepted recovery limits

EPA Method TO-15 Results
(after exist SSD system shut down 20 hours)

Printed
Wed Apr 24, 2013

210 French Road
Test location B follow-up
Warehouse; center-east (Column E.4-2.4)
Sub-slab Vapor Sample
Sample 189-04-210BF-S
Thu Jan 27, 2011

CAS	Compound	Data Qualifiers	Dilution Factor	µg/m³ Concentration	µg/m³ Practical Quantitation Limit	ppbVolume Concentration	ppbVolume Practical Quantitation Limit	*Tentative recommendation based on NYSDOH Soil Vapor/Indoor Air Matrix 1 and Matrix 2*
56-23-5	Carbon tetrachloride		1	nd	1.3	nd	0.20	***No further action***
79-01-6	Trichloroethene		1	**93**	1.1	**17**	0.20	***Resample (SSV, IA, OA)***
75-01-4	Vinyl chloride		1	nd	0.52	nd	0.20	***No further action***
71-55-6	*1,1,1-Trichloroethane*		1	**18**	1.1	**3.2**	0.20	***Resample (SSV, IA, OA)***
75-35-4	1,1-Dichloroethene		5	**720**	4.0	**180**	1.0	***Resample (SSV, IA, OA)***
156-59-2	cis-1,2-Dichloroethene		1	**43**	0.81	**11**	0.20	***Resample (SSV, IA, OA)***
127-18-4	*Tetrachloroethene*		1	**4.7**	1.4	**0.68**	0.20	***Resample (SSV, IA, OA)***

nd = not detected at the Practical Quantitation Limit

Key to Compound List
All above are found in CMS wells
italic = found in LUST contents
underlined = in soil surrounding LUST

Data Qualifiers
Some reporting limits were raised due to high target compounds

E	Value above quantitation range
J	Analyte detected below quantitation limit
Q	Outlying QC recoveries were associated with this analyte
B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike Recovery outside accepted recovery limits

Printed
Wed Apr 24, 2013

210 French Road
Test location D
(Warehouse; center-south (Column C.9-3.8)
Sub-slab Vapor Sample
Sample 189-04-210D-S
Wed Dec 15, 2010

EPA Method TO-15 Results

CAS	Compound	Data Qualifiers	Dilution Factor	µg/m³ Concentration	µg/m³ Practical Quantitation Limit	ppbVolume Concentration	ppbVolume Practical Quantitation Limit	*Tentative recommendation based on NYSDOH Soil Vapor/Indoor Air Matrix 1 and Matrix 2*
56-23-5	Carbon tetrachloride		1	**360**	1.3	**57**	0.20	***Mitigate***
79-01-6	Trichloroethene		167	**2100**	180	**380**	33	***Mitigate***
75-01-4	Vinyl chloride		1	**5.9**	0.52	**2.3**	0.20	***Resample (SSV, IA, OA)***
71-55-6	*1,1,1-Trichloroethane*		167	**3700**	180	**670**	33	***Mitigate***
75-35-4	1,1-Dichloroethene		167	**40000**	130	**10000**	33	***Mitigate***
156-59-2	cis-1,2-Dichloroethene		1	**46**	0.81	**11**	0.20	***Resample (SSV, IA, OA)***
127-18-4	*Tetrachloroethene*		1	**260**	1.4	**38**	0.20	***Mitigate***

nd = not detected at the Practical Quantitation Limit

Key to Compound List
All above are found in CMS wells
italic = found in LUST contents
underlined = in soil surrounding LUST

Data Qualifiers
Some reporting limits were raised due to high target compounds
E Value above quantitation range
J Analyte detected below quantitation limit
Q Outlying QC recoveries were associated with this analyte
B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
S Spike Recovery outside accepted recovery limits

Printed
Wed Apr 24, 2013

210 French Road
Test location H
Former south offices; east (Column A2-2.9)
Sub-slab Vapor Sample
Sample 189-04-210H-S
Wed Dec 15, 2010

EPA Method TO-15 Results

CAS	Compound	Data Qualifiers	Dilution Factor	µg/m³ Concentration	µg/m³ Practical Quantitation Limit	ppbVolume Concentration	ppbVolume Practical Quantitation Limit	*Tentative recommendation based on NYSDOH Soil Vapor/Indoor Air Matrix 1 and Matrix 2*
71-55-6	Carbon tetrachloride		1	nd	1.3	nd	0.20	***No further action***
79-01-6	Trichloroethene		1	nd	1.1	nd	0.20	***No further action***
75-01-4	Vinyl chloride		1	nd	0.5	nd	0.2	***No further action***
79-34-5	*1,1,1-Trichloroethane*		1	**14**	1.1	**2.6**	0.20	***Resample (SSV, IA, OA)***
120-82-1	1,1-Dichloroethene		1	nd	0.81	nd	0.20	***No further action***
156-59-2	cis-1,2-Dichloroethene		1	nd	0.81	nd	0.20	***No further action***
127-18-4	*Tetrachloroethene*		1	**8.9**	1.4	**1.3**	0.20	***Resample (SSV, IA, OA)***

nd = not detected at the Practical Quantitation Limit

Key to Compound List
All above are found in CMS wells
italic = found in LUST contents
underlined = in soil surrounding LUST

Data Qualifiers

Qualifiers	
E	Value above quantitation range
J	Analyte detected below quantitation limit
Q	Outlying QC recoveries were associated with this analyte
B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike Recovery outside accepted recovery limits

Printed
Wed Apr 24, 2013

210 French Road
Test location L
Former south offices; west (Column A.5-5.8)
Sub-slab Vapor Sample
Sample 189-04-210L-S
Tue Dec 14, 2010

EPA Method TO-15 Results

CAS	Compound	Data Qualifiers	Dilution Factor	µg/m³ Concentration	µg/m³ Practical Quantitation Limit	ppbVolume Concentration	ppbVolume Practical Quantitation Limit	*Tentative recommendation based on NYSDOH Soil Vapor/Indoor Air Matrix 1 and Matrix 2*
56-23-5	Carbon tetrachloride		1	nd	1.3	nd	0.20	***No further action***
79-01-6	Trichloroethene		1	**1.4**	1.1	**0.26**	0.20	***Resample (SSV, IA, OA)***
75-01-4	Vinyl chloride		1	nd	0.52	nd	0.20	***No further action***
71-55-6	*1,1,1-Trichloroethane*		1	**3.9**	1.1	**0.71**	0.20	***Resample (SSV, IA, OA)***
75-35-4	1,1-Dichloroethene		1	**33**	0.81	**8.2**	0.20	***Resample (SSV, IA, OA)***
156-59-2	cis-1,2-Dichloroethene		1	nd	0.81	nd	0.20	***No further action***
127-18-4	*Tetrachloroethene*		1	nd	1.4	nd	0.20	***No further action***

nd = not detected at the Practical Quantitation Limit

Key to Compound List
All above are found in CMS wells
italic = found in LUST contents
underlined = in soil surrounding LUST

Data Qualifiers

Qualifiers

E	Value above quantitation range
J	Analyte detected below quantitation limit
Q	Outlying QC recoveries were associated with this analyte
B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike Recovery outside accepted recovery limits

Printed
Wed Apr 24, 2013

210 French Road

Test location Q
East storage area; north (Column E.1-1.2)
Sub-slab Vapor Sample
Sample 189-04-210Q-S
Tue Dec 14, 2010

EPA Method TO-15 Results

CAS	Compound	Data Qualifiers	Dilution Factor	µg/m³ Concentration	µg/m³ Practical Quantitation Limit	ppbVolume Concentration	ppbVolume Practical Quantitation Limit	*Tentative recommendation based on NYSDOH Soil Vapor/Indoor Air Matrix 1 and Matrix 2*
56-23-5	Carbon tetrachloride		1	**5.1**	1.3	**0.79**	0.20	***Resample (SSV, IA, OA)***
79-01-6	Trichloroethene		1	**22**	1.1	**4.1**	0.20	***Resample (SSV, IA, OA)***
75-01-4	Vinyl chloride		1	nd	0.52	nd	0.20	***No further action***
71-55-6	*1,1,1-Trichloroethane*		1	**43**	1.1	**7.8**	0.20	***Resample (SSV, IA, OA)***
75-35-4	1,1-Dichloroethene		5	**22**	4.0	**5.6**	1.0	***Resample (SSV, IA, OA)***
156-59-2	cis-1,2-Dichloroethene		1	**1.4**	0.81	**0.34**	0.20	***Resample (SSV, IA, OA)***
127-18-4	*Tetrachloroethene*		1	**4.3**	1.4	**0.63**	0.20	***Resample (SSV, IA, OA)***

nd = not detected at the Practical Quantitation Limit

Key to Compound List
All above are found in CMS wells
italic = found in LUST contents
underlined = in soil surrounding LUST

Data Qualifiers
Some reporting limits were raised due to high target compounds
E Value above quantitation range
J Analyte detected below quantitation limit
Q Outlying QC recoveries were associated with this analyte
B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
S Spike Recovery outside accepted recovery limits

Printed
Wed Apr 24, 2013

210 French Road
Test location R
No. Maintenance shop; west (Column I.2-3.5)
Sub-slab Vapor Sample
Sample 189-04-210R-S
Fri Dec 17, 2010

EPA Method TO-15 Results

CAS	Compound	Data Qualifiers	Dilution Factor	µg/m³ Concentration	µg/m³ Practical Quantitation Limit	ppbVolume Concentration	ppbVolume Practical Quantitation Limit	*Tentative recommendation based on NYSDOH Soil Vapor/Indoor Air Matrix 1 and Matrix 2*
56-23-5	Carbon tetrachloride		1	nd	1.3	nd	0.2	***No further action***
79-01-6	Trichloroethene		1	**17**	1.1	**3.2**	0.2	***Resample (SSV, IA, OA)***
75-01-4	Vinyl chloride		1	nd	0.52	nd	0.20	***No further action***
71-55-6	*1,1,1-Trichloroethane*		1	**24**	1.1	**4.3**	0.2	***Resample (SSV, IA, OA)***
75-35-4	1,1-Dichloroethene		1	**2.1**	0.81	**0.52**	0.20	***Resample (SSV, IA, OA)***
156-59-2	cis-1,2-Dichloroethene		1	**6.4**	0.81	**1.6**	0.20	***Resample (SSV, IA, OA)***
127-18-4	*Tetrachloroethene*		1	**110**	1.4	**16**	0.2	***Resample (SSV, IA, OA)***

nd = not detected at the Practical Quantitation Limit

Key to Compound List
All above are found in CMS wells
italic = found in LUST contents
underlined = in soil surrounding LUST

Data Qualifiers
Some reporting limits were raised due to high target compounds
E Value above quantitation range
J Analyte detected below quantitation limit
Q Outlying QC recoveries were associated with this analyte
B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
S Spike Recovery outside accepted recovery limits

EPA Method TO-15 Results
(after exist SSD system shut down 20 hours)

Printed
Wed Apr 24, 2013

210 French Road
Test location T
Warehouse; north-west (Column H.8-5.5)
Sub-slab Vapor Sample
Sample 189-04-210T-S
Fri Dec 17, 2010

CAS	Compound	Data Qualifiers	Dilution Factor	µg/m³ Concentration	µg/m³ Practical Quantitation Limit	ppbVolume Concentration	ppbVolume Practical Quantitation Limit	*Tentative recommendation based on NYSDOH Soil Vapor/Indoor Air Matrix 1 and Matrix 2*
71-55-6	Carbon tetrachloride		1	nd	1.3	nd	0.20	***No further action***
79-01-6	Trichloroethene		1	**35**	1.1	**6.4**	0.20	***Resample (SSV, IA, OA)***
75-01-4	Vinyl chloride		1	nd	0.52	nd	0.20	***No further action***
79-34-5	*1,1,1-Trichloroethane*		145	**13000**	160	**2300**	29	***Resample (SSV, IA, OA)***
120-82-1	1,1-Dichloroethene		1	**15**	0.81	**3.6**	0.20	***Resample (SSV, IA, OA)***
156-59-2	cis-1,2-Dichloroethene		1	nd	0.81	nd	0.20	***No further action***
127-18-4	*Tetrachloroethene*		1	**83**	1.4	**12**	0.20	***Resample (SSV, IA, OA)***

nd = not detected at the Practical Quantitation Limit

Key to Compound List
All above are found in CMS wells
italic = found in LUST contents
underlined = in soil surrounding LUST

Data Qualifiers
Some reporting limits were raised due to high target compounds
E Value above quantitation range
J Analyte detected below quantitation limit
Q Outlying QC recoveries were associated with this analyte
B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
S Spike Recovery outside accepted recovery limits

Printed
Wed Apr 24, 2013

210 French Road
Test location U
Warehouse; north-east (Column H.1-1.4)
Sub-slab Vapor Sample
Sample 189-04-210U-S
Fri Dec 17, 2010

EPA Method TO-15 Results

CAS	Compound	Data Qualifiers	Dilution Factor	µg/m³ Concentration	µg/m³ Practical Quantitation Limit	ppbVolume Concentration	ppbVolume Practical Quantitation Limit	*Tentative recommendation based on NYSDOH Soil Vapor/Indoor Air Matrix 1 and Matrix 2*
56-23-5	Carbon tetrachloride		1	nd	1.3	nd	0.20	***No further action***
79-01-6	Trichloroethene		1	**11**	1.1	**2.1**	0.20	***Resample (SSV, IA, OA)***
75-01-4	Vinyl chloride		1	**2.5**	0.52	**0.95**	0.20	***Resample (SSV, IA, OA)***
71-55-6	*1,1,1-Trichloroethane*		5	**510**	5.5	**93**	1.0	***Resample (SSV, IA, OA)***
75-35-4	1,1-Dichloroethene		1	**12**	0.81	**3.0**	0.20	***Resample (SSV, IA, OA)***
156-59-2	cis-1,2-Dichloroethene		1	nd	0.81	nd	0.20	***No further action***
127-18-4	*Tetrachloroethene*		1	**7.7**	1.4	**1.1**	0.20	***Resample (SSV, IA, OA)***

nd = not detected at the Practical Quantitation Limit

Key to Compound List
All above are found in CMS wells
italic = found in LUST contents
underlined = in soil surrounding LUST

Data Qualifiers
Some reporting limits were raised due to high target compounds
E Value above quantitation range
J Analyte detected below quantitation limit
Q Outlying QC recoveries were associated with this analyte
B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
S Spike Recovery outside accepted recovery limits

Printed
Wed Apr 24, 2013

210 French Road
Test location V
Warehouse; west-center (Column E..1-5.8)
Sub-slab Vapor Sample
Sample 189-04-210V-S
Fri Dec 17, 2010

EPA Method TO-15 Results

CAS	Compound	Data Qualifiers	Dilution Factor	µg/m³ Concentration	µg/m³ Practical Quantitation Limit	ppbVolume Concentration	ppbVolume Practical Quantitation Limit	*Tentative recommendation based on NYSDOH Soil Vapor/Indoor Air Matrix 1 and Matrix 2*
56-23-5	Carbon tetrachloride		1	nd	1.3	nd	0.20	***No further action***
79-01-6	Trichloroethene		1	**5.2**	1.1	**0.95**	0.20	***Resample (SSV, IA, OA)***
75-01-4	Vinyl chloride		1	nd	0.52	nd	0.20	***No further action***
71-55-6	*1,1,1-Trichloroethane*		1	**21**	1.1	**3.7**	0.20	***Resample (SSV, IA, OA)***
75-35-4	1,1-Dichloroethene		1	**35**	0.81	**8.6**	0.20	***Resample (SSV, IA, OA)***
156-59-2	cis-1,2-Dichloroethene		1	**2.6**	0.81	**0.65**	0.20	***Resample (SSV, IA, OA)***
127-18-4	Tetrachloroethene		1	**2.1**	1.4	**0.31**	0.20	***Resample (SSV, IA, OA)***

nd = not detected at the Practical Quantitation Limit

Key to Compound List
All above are found in CMS wells
italic = found in LUST contents
underlined = in soil surrounding LUST

Data Qualifiers

Qualifiers
- E Value above quantitation range
- J Analyte detected below quantitation limit
- Q Outlying QC recoveries were associated with this analyte
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- S Spike Recovery outside accepted recovery limits

Printed
Wed Apr 24, 2013

210 French Road
Test location W
Former south offices; center (Column A.4-3.8)
Sub-slab Vapor Sample
Sample 189-04-210W
Wed Jan 26, 2011

EPA Method TO-15 Results

CAS	Compound	Data Qualifiers	Dilution Factor	µg/m³ Concentration	µg/m³ Practical Quantitation Limit	ppbVolume Concentration	ppbVolume Practical Quantitation Limit	*Tentative recommendation based on NYSDOH Soil Vapor/Indoor Air Matrix 1 and Matrix 2*
56-23-5	Carbon tetrachloride		1	**1.3**	1.3	**0.21**	0.20	***Resample (SSV, IA, OA)***
79-01-6	Trichloroethene		1	nd	1.1	nd	0.20	***No further action***
75-01-4	Vinyl chloride		1	nd	0.52	nd	0.20	***No further action***
71-55-6	*1,1,1-Trichloroethane*		1	**8.8**	1.1	**1.6**	0.20	***Resample (SSV, IA, OA)***
75-35-4	1,1-Dichloroethene		1	**2.2**	0.81	**0.54**	0.20	***Resample (SSV, IA, OA)***
156-59-2	cis-1,2-Dichloroethene		1	nd	0.81	nd	0.20	***No further action***
127-18-4	*Tetrachloroethene*		1	**7.3**	1.4	**1.1**	0.20	***Resample (SSV, IA, OA)***

nd = not detected at the Practical Quantitation Limit

Key to Compound List
All above are found in CMS wells
italic = found in LUST contents
underlined = in soil surrounding LUST

Data Qualifiers
Some reporting limits were raised due to high target compounds
E Value above quantitation range
J Analyte detected below quantitation limit
Q Outlying QC recoveries were associated with this analyte
B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
S Spike Recovery outside accepted recovery limits

Printed
Wed Apr 24, 2013

210 French Road
Test location X
Loading dock (Column C.8-5.4)
Sub-slab Vapor Sample
Sample 189-04-210X
Fri Dec 17, 2010

EPA Method TO-15 Results

CAS	Compound	Data Qualifiers	Dilution Factor	µg/m³ Concentration	µg/m³ Practical Quantitation Limit	ppbVolume Concentration	ppbVolume Practical Quantitation Limit	*Tentative recommendation based on NYSDOH Soil Vapor/Indoor Air Matrix 1 and Matrix 2*
71-55-6	Carbon tetrachloride		1	nd	1.3	nd	0.20	***No further action***
79-01-6	Trichloroethene		148	**3200**	160	**580**	30	***Mitigate***
75-01-4	Vinyl chloride		1	nd	0.52	nd	0.20	***No further action***
79-34-5	*1,1,1-Trichloroethane*		1	**110**	1.1	**19**	0.20	***Resample (SSV, IA, OA)***
75-35-4	1,1-Dichloroethene		1	**320**	0.81	**78**	0.20	***Resample (SSV, IA, OA)***
156-59-2	cis-1,2-Dichloroethene		1	**200**	0.81	**50**	0.20	***Resample (SSV, IA, OA)***
127-18-4	*Tetrachloroethene*		148	**21000**	210	**3000**	30	***Mitigate***

nd = not detected at the Practical Quantitation Limit

Key to Compound List
All above are found in CMS wells
italic = found in LUST contents
underlined = in soil surrounding LUST

Data Qualifiers
Some reporting limits were raised due to high target compounds
E Value above quantitation range
J Analyte detected below quantitation limit
Q Outlying QC recoveries were associated with this analyte
B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
S Spike Recovery outside accepted recovery limits