



WALDEN ASSOCIATES, INC.

ENVIRONMENTAL CONSULTANTS
16 SPRING STREET
OYSTER BAY, NEW YORK 11771
(516) 624-7200, FAX (516) 624-3219
EMAIL: INQUIRIES@WALDEN-ASSOC.COM

AIRBORNE EXPRESS # 4797781833

August 31, 2004

Mr. Joseph Jones
DER, Remedial Bureau A
New York State Department of Environmental Conservation
625 Broadway, 11th Floor
Albany, New York 12233-7015



Re: NYSDEC Voluntary Cleanup Program Site #V-00244-1
Imperial Cleaners, ACO #D1-30001-01-03 effective 4/18/01
Revised SVE System Closure Work Plan

Dear Mr. Jones:

Walden Associates, Inc (Walden) is submitting a Revised Soil-Vapor Extraction (SVE) System Closure Work Plan for the above referenced site. The revised Work Plan addresses the issues described in the New York State Department of Environmental Conservation (NYSDEC) letter to Walden dated May 12, 2004, which was in response to Walden's original SVE System Closure Work Plan, submitted on March 19, 2004. The NYSDEC letter listed eight points to be addressed before the SVE Closure Work Plan could be approved. The following responds to each of the eight items listed in the NYSDEC correspondence and each of the items has been incorporated into the attached Revised SVE System Closure Work Plan.

1. The proposed locations of the post-remediation soil borings (SB-1 to SB-4 on Figure 1 of the attached report) correspond to the locations of the original source areas identified during source area investigation and excavation activities conducted by Anson Environmental, Ltd (AEL) in 1995, 1996 and 2000. The Work Plan has been amended to include a fourth post remediation boring, to be installed near Floor Drain, FD-2, located inside the basement of Imperial Cleaners (Figure 1).

2. Soil samples will be collected every five feet and screened on-site with a PID. The sample with the highest PID reading and/or the sample collected directly above the perched water table will be submitted for laboratory analysis. A second sample will be collected from a depth corresponding to the depth where VOCs exceeding the Recommended Soil Clean-up Objective (RSCO) as per NYSDEC TAGM Memo 4046 were detected during original source area investigation activities conducted by AEL. These depths are summarized in the attached Work Plan.
3. The soil sample intervals include the depths of end-point samples that contained VOCs at concentrations exceeding the RSCOs. The soil analytical data was taken from AELs Interim Remedial Measures (IRM)/Supplemental Investigation Work Plan, dated January 18, 2001.
4. A soil-gas sampling point will be installed between Imperial Cleaners and the residence at 2 University Place and between Imperial Cleaners and the building located at 220 Lakeville Road (Figure 1).
5. Two soil-gas sampling events and two indoor air sampling events were proposed in the initial SVE System Closure Work Plan, and based on the results of these events a decision on subsequent events will be made. If the analytical results compare favorably to New York State Department of Health (NYSDOH) Guidance Values, Walden will propose to discontinue soil-vapor sampling.
6. It has been Walden's experience that the vapor samples will not be compromised by the use of PVC in the construction of the sampling points.
7. All samples will be submitted to laboratories that are approved for the analyses by the NYSDOH Environmental Laboratory Approval Program. Soil and soil-vapor samples will be submitted to Severn Trent Laboratories located in Shelton, CT, and Perc badges will be submitted to Galson Laboratories located in East Syracuse, NY. Please note that the use of methanol preservative for soil samples was discussed with the NYSDEC and will not be used for this investigation.
8. The decision to use the soil sampling borings for soil-gas sample points was discussed in a conference call between NYSDEC, Ms. Becky Mitchell of the NYSDOH and Bryan Irving of Walden on February 24, 2004. The rationale for the boring placements was that these points would provide "worst-case" data for soil vapor, as they are closest to the original source areas. Please note that two soil-vapor sampling points will be installed in separate borings, as described above in item # 4 in order to determine the extent of residual soil vapor closer to nearby buildings.

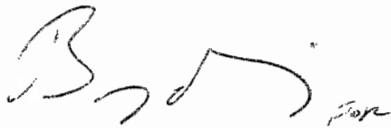
The following is a revised project schedule, with the tasks beginning two weeks from NYSDEC and NYSDOH approval of the Work Plan.

Project Schedule

TASK	Date
SVE System Shut Down	System is currently off
Installation of Post Remediation Soil Borings/ Soil-Gas Sampling Points	Within three weeks of Work Plan Approval
Soil-Gas Sampling – 2 Events	One week and three weeks from installation of sampling points
PERC Badge Sampling – 2 Events	One week and three weeks from installation of sampling points

Please feel free to call Bryan Irving or myself if you wish to discuss the information presented in this report.

Very truly yours,
Walden Associates, Inc.
Environmental Consultants



Joseph M. Heaney III, PE
Principal

Att.

C: K. Carpenter
M. Lesser, Esq.
B. Mitchell- NYSDOH
J. DeFranco - NCDOH
F. Werfel
M. Rubin, Esq.
D. Anson

**218 LAKEVILLE ROAD ASSOCIATES
HICKSVILLE, NEW YORK**

**SOIL-VAPOR EXTRACTION SYSTEM
CLOSURE WORK PLAN**

**IMPERIAL CLEANERS SITE
218 LAKEVILLE ROAD
LAKE SUCCESS, NEW YORK
VOLUNTARY CLEANUP PROGRAM SITE NO. V-00244-1**

August 2004

Prepared For:

Mr. Joe Jones
DEC DER Project Manager
New York State Department of
Environmental Conservation
625 Broadway, 11th Floor
Albany, New 12233-7015



WALDEN ASSOCIATES, INC.

ENVIRONMENTAL CONSULTANTS
16 SPRING STREET
OYSTER BAY, NEW YORK 11771
(516) 624-7200, FAX (516) 624-3219
CONTACT: JOSEPH M. HEANEY III, PE

TABLE OF CONTENTS

INTRODUCTION1

FIELD INVESTIGATION SITE CHARACTERISTICS1

 POST REMEDIATION SOIL BORINGS.....1

 SOIL SAMPLING1

 SOIL-GAS SAMPLING2

 SOIL-GAS SAMPLE POINT INSTALLATION.....2

 SOIL-GAS SAMPLING3

INDOOR AIR SAMPLING.....3

PROJECT SCHEDULE.....4

FIGURE

FIGURE 1 SITE PLAN WITH SOIL BORING AND SOIL-GAS SAMPLING
 LOCATIONS

INTRODUCTION

The following Revised Soil-Vapor Extraction (SVE) System Closure Work Plan was prepared by Walden Associates, Inc (Walden), on behalf of the owner of 218 Lakeville Rd (Imperial Cleaners). The site is part of the Voluntary Clean-Up Program, Site No. V-00244-1, effective April 18, 2001. This Work Plan includes comments from the February 24, 2004, telephone conversation between Mr. Joseph Jones of the New York State Department of Environmental Conservation (NYSDEC), Ms. Becky Mitchell of the New York State Department of Health (NYSDOH) and Bryan Irving of Walden. In addition, the Work Plan addresses the issues described in the NYSDEC letter dated May 12, 2004, which was in response to Walden's original SVE System Closure Work Plan, submitted on March 19, 2004. The Work Plan includes post-remediation soil sampling, soil-gas sampling and indoor air sampling. A Work Plan implementation schedule is included.

FIELD INVESTIGATION

Post-Remediation Soil Borings

Four soil borings will be installed in locations that correspond to the source areas originally identified by Anson Environmental, Ltd (AEL) during source area investigation/excavation activities in 1995, 1996 and 2000. Post remediation soil borings SB-1, SB-2, SB-3 and SB-4 correspond to source areas DW-1, FD-1, FD-2 and LP-2. Figure 1 shows the proposed soil boring locations and Figure 2 shows the locations of former source areas and soil sample locations.

Soil Sampling

Borings SB-1, SB-2 and SB-4 will be advanced utilizing a Geoprobe™, and a hand auger will be utilized for the installation of boring SB-3, as it is located in the basement of Imperial Cleaners. The borings will be advanced to approximately 30 feet below grade (the depth of the perched water table). Please note that boring SB-3 will be advanced as far as possible by hand and Walden will strive to reach 20 feet below grade.

Soil samples will be collected every five feet and screened on-site with a PID. Samples to be submitted for laboratory analysis include the sample with the highest PID reading and/or the sample collected directly above the perched water table, and the sample corresponding to the depth where VOCs exceeding the Recommended Soil Clean-up Objective (RSCO) as per NYSDEC TAGM Memo 4046 were detected during original source area investigation activities conducted by AEL. The Table below summarizes the depths for each boring where RSCO's were exceeded. All soil samples will be submitted to Severn Trent Laboratory, a NYS certified laboratory and part of the New York State Department of Health's (NYSDOH) Environmental Laboratory Approval Program for VOC analysis, utilizing EPA Method 8260. It is expected that comparison of the analytical results and the NYS RSCO for Protection of Groundwater, as per TAGM Memo 4046 will demonstrate that permanent closure of the SVE system is warranted.

Post remediation Soil Boring ID (Former Soil Sample ID)	Previous Sample Depth (Feet below grade)	Previous PCE Result (ug/kg)
SB-1 (DW-1)	21	5,100,000
SB-2 (FD-1)	6.5	11,000
SB-3 (FD-2)	10	5,500,000
SB-4 (LP-2)	17.5	1,600

Data taken from AELs IRM/Supplemental Investigation Plan dated January 18, 2001.

Soil Gas Sampling

Soil-gas sampling points will be installed at four locations (Figure 1). Two points (SG-1 and SG-4) will be installed in the same borehole as post remediation borings SB-1 and SB-4, respectively. Two additional soil-gas points (SG-2 and SG-3) will be installed in separate boreholes located between Imperial Cleaners and 2 University Place and 220 Lakeville Rd, respectively (Figure 1).

Soil-Gas Sample Point Installation

Each of the soil-gas sampling points will be constructed of 8 feet of 1/2-inch, Schedule 40 PVC, followed by 2 feet of 0.020-inch slotted PVC screen. The total depth of 10 feet corresponds to the depth of the basements located in 218 Lakeville Rd and in the residences located at 2 and 4 University Place (Figure 1). The borehole annulus will consist of #1 Morie well gravel from 11

to 7 feet below grade followed by a two-foot bentonite seal and a bentonite/grout mix to grade. Please note that prior to installing well points SG-1 and SG-4 in the same boreholes as post remediation borings, the boreholes will be backfilled with clean sand to 12.5 feet below grade, followed by a 2-foot bentonite seal and 6-inches of clean sand in order to ensure the soil-gas samples are discreet samples, representative of the desired depth. Each point will be completed with an 8-inch diameter bolt-down well box and a hose barb to facilitate sample collection.

Soil-Gas Sampling

Soil-gas samples will be collected one week and three weeks after the points are installed. The volume of air in the vapor sampling point was calculated to be 0.82 liters. Therefore, the point will be purged for approximately 4.5 minutes at a flow rate of 200 ml per minute. The soil-gas samples will then be collected using a SUMMA canister provided by the laboratory, equipped w/ valve to collect the sample at a rate of 200 ml per minute. The vapor samples will be submitted Severn Trent Lab, a NYSDOH ELAP approved laboratory, for analysis of VOCs via EPA Method TO14.

Indoor Air Sampling

Walden will conduct Perc badge sampling one week and three weeks after the soil borings are installed. The Perc badges will be placed in the NYSDOH-approved locations in 2 University Place, 4 University Place, 218 Lakeville Road, and 216 Lakeville Road, as have been sampled in the past. Vapor samples will be submitted Galson Laboratories, a NYSDOH ELAP approved laboratory, for analysis of tetrachloroethylene and its breakdown compounds; Trichloroethylene, 1,1,1 Trichloroethane, 1,1,2 Trichloroethane, 1, 2 Dichloroethylene, 1,1 Dichloroethane and Vinyl Chloride via NYSDOH Method 311-9.

Project Schedule

TASK	Date
SVE System Shut Down	Turned off on March 8, 2004
Post Remediation Soil Borings/Install Soil-Gas Sampling Points	Within 3 weeks after Work Plan is approved
Soil-Gas Sampling – 2 Events	1 & 3 weeks after points are installed
Perc Badge Sampling – 2 Events	1 & 3 weeks after points are installed

Walden will transmit the soil laboratory data and the results of the initial soil-gas and Perc badge sampling to the NYSDEC and NYSDOH as soon as they become available. If the soil, soil-gas and PERC badge results compare favorably to the NYSRSCO's and NYSDOH guidance values, the SVE system will remain off and the second round of PERC badge and soil-gas sampling will be conducted. Once all the data is received a comprehensive closure request will be submitted in support of NYSDEC approval of permanent SVE system shut down.

Walden requests NYSDEC and NYSDOH approval or comment regarding this Work Plan so that we may continue with the SVE system closure process.


LEGEND

Site Features:

DW #2  STORMWATER DRYWELL AND NUMBER


LP3  LEACHING POOL AND NUMBER

Source & Contaminated Samples:


 FD-2 SHOWN IN RED - FORMER SOURCE AREAS PER AEC IRM/SUPPLEMENTAL INVESTIGATION PLAN, JAN 2001

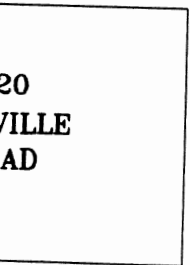
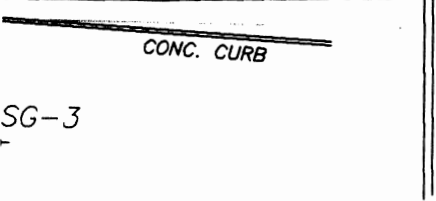
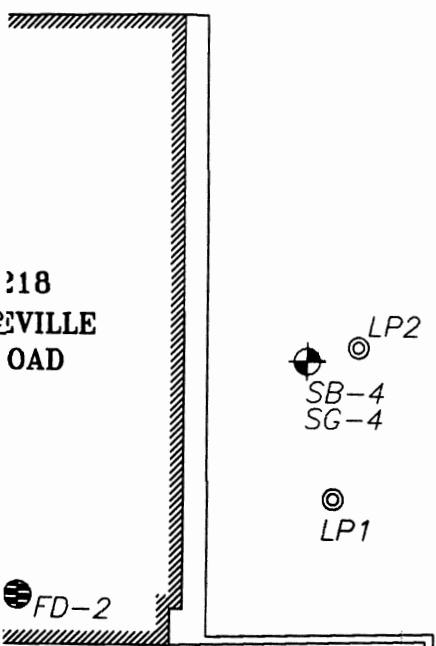
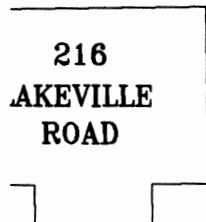
SHOWN IN ORANGE - SOIL SAMPLES WITH VOC CONCENTRATIONS EXCEEDING TAGM 4046 VALUES

Proposed Post-Remediation Sample:

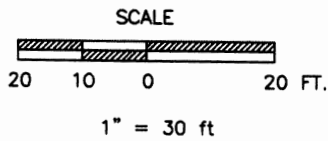
 SG-1 PROPOSED SOIL-GAS SAMPLING POINT

 SB-1 PROPOSED POST-REMEDATION SOIL BORING

 SB-1
SG-1 PROPOSED POST-REMEDATION SOIL BORING WITH SOIL-GAS SAMPLING



LAKEVILLE ROAD



NOTES

1. Site base map was derived from a property survey prepared by Welsh Engineering & Land Surveying, P.C., 343 Manville Road, Pleasantville, NY 10570, revised on 7/14/00.
2. The Welsh Engineering north area was corrected based on 1999 Nassau County GIS basemap.

WALDEN ASSOCIATES INC.
 ENVIRONMENTAL CONSULTANTS
 16 SPRING STREET
 OYSTER BAY, NEW YORK 11771
 (516) 624-7200 FAX (516) 624-3219



FORMER SOURCE AREAS & SOIL SAMPLING LOCATIONS
 218 LAKEVILLE ROAD
 IMPERIAL CLEANERS
 LAKE SUCCESS, NEW YORK

JOB #: SPQL800 FILE NAME: SPQL800_soil.sam.plt PLOT DATE: