



City of Rochester

FILE

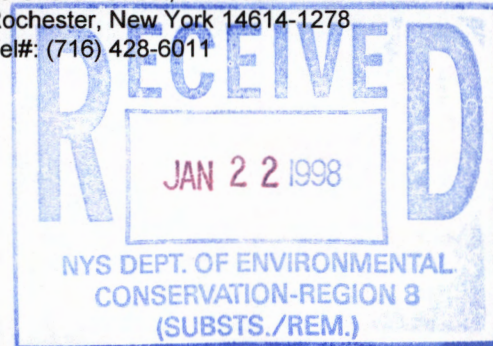
FAX (716) 428-6010
TDD/Voice 232-3260

Department of
Environmental Services

Office of the Commissioner
Division of Environmental Quality
30 Church Street, Rm 300B
Rochester, New York 14614-1278
Tel#: (716) 428-6011

January 13, 1998

Todd M. Caffoe, P.E.
Environmental Engineer II - Division of Hazardous Waste Remediation
New York State Department of Environmental Conservation
6274 East Avon-Lima Road
Avon, New York 14414-9519



Re: Quarterly Monitoring Report - Court Street Garage Soil Vapor Extraction System
Rochester, New York

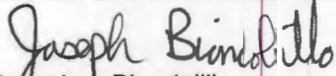
Dear Mr. Caffoe:

Enclosed are the soil vapor extraction system (SVES) air monitoring data and sampling results for the quarterly sampling at the above-referenced property (site). Marcor Remediation, Inc. (Marcor) measured SVES vacuum and vapor effluent concentrations for each individual cell (i.e., loop), as well as the entire SVES.

In accordance with the approved SVES Operation and Maintenance Plan, one air sample of the SVES air effluent was collected on July 28, 1997. This sample was analyzed for volatile organic compounds (VOCs) via NIOSH method T-014. According to the analytical results, twenty (20) VOCs were detected, ranging in concentration from 0.97 ug/m³ to a maximum of 2,100 ug/m³ of tetrachloroethene (i.e., perchloroethylene or PCE). Table 1A summarizes the concentration of each VOC detected, and also presents the calculated annual emission rate, and the calculated maximum annual and maximum short-term impact for each VOC detected. As illustrated in Table 1A, each VOC was detected at a concentration below its respective Air Guide-1 Short-term Guidance Concentration (SGC) and Annual Guidance Concentration (AGC). The enclosed graph illustrates the concentration of PCE and total VOCs detected since start-up. As the data illustrates, the concentration of most of the contaminants detected in the latest sampling round increased as compared to the last two sampling events.

Please note that the City's contract with the consultant performing the quarterly monitoring and sampling of the SVES expired this past fall, resulting some delays in the sampling and reporting of the SVES data to you. We expect the next sampling event to be performed sometime in February 1998. If you have any questions or comments regarding this data package, please call me at 428-6649.

Sincerely,
Division of Environmental Quality


Joseph J. Biondolillo
Environmental Specialist

c: Mark Gregor, City of Rochester (w/o enclosures)
Joseph Alber, MICDOH
Dave Napier, NY'SDOH

jb186

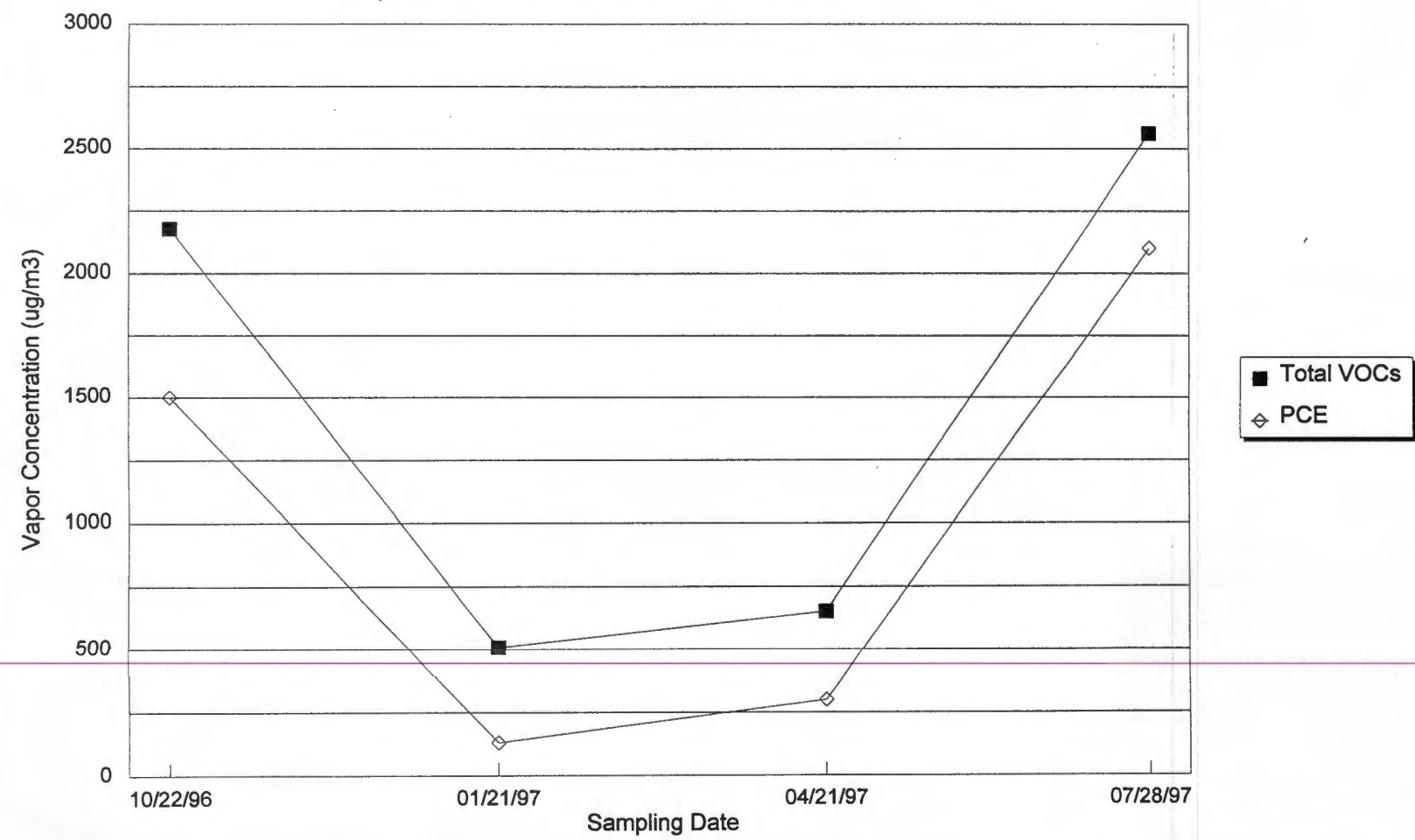
EEO Employer/Handicapped



Table 1A. Court Street Garage SVE System 94 Air Guide -1 Permit Comparisons AIRGD94

Today's Date:										
01/13/98										
Sample Date:										
07/28/97										
Sampled by:										
Marcor Remediation, Inc.										
	Effluent Air			Annual		Max. Act. Annual	Max. Pot. Annual	Max. Short-Term		
Detected	Concentration	Air Flow	Emissions	Emissions	Stack	Impact Ca	Impact Cp	Impact Cst	AGC	SGC
Contaminant	mg/m3	cfm	lb/hr	lb/yr	Height (ft)	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3
Acetone	0.021	40	3.1463E-06	2.7561E-02	81.78	8.22E-06	8.21E-06	5.34E-04	1.40E+05	1.40E+04
Benzene	0.0011	40	1.6481E-07	1.4437E-03	81.78	4.31E-07	4.30E-07	2.80E-05	1.20E-01	3.00E+01
2-Butanone (MEK)	0.0044	40	6.5922E-07	5.7748E-03	81.78	1.72E-06	1.72E-06	1.12E-04	3.00E+02	1.40E+05
Carbon Disulfide	0.018	40	2.6968E-06	2.3624E-02	81.78	7.05E-06	7.04E-06	4.58E-04	7.00E+00	7.10E+02
Carbon Tetrachloride	0.200	40	2.9965E-05	2.6249E-01	81.78	7.83E-05	7.82E-05	5.08E-03	7.00E-02	1.30E+03
Chloroethane (ethyl chloride)	0.0068	40	1.0188E-06	8.9247E-03	81.78	2.66E-06	2.66E-06	1.73E-04	6.30E+04	6.30E+05
Chloroform	0.017	40	2.5470E-06	2.2312E-02	81.78	6.66E-06	6.65E-06	4.32E-04	2.30E+01	9.80E+02
Chloromethane	0.0016	40	2.3972E-07	2.0999E-03	81.78	6.26E-07	6.26E-07	4.07E-05	7.70E+02	2.20E+04
cis-1,2-Dichloroethene	0.057	40	8.5399E-06	7.4810E-02	81.78	2.23E-05	2.23E-05	1.45E-03	1.90E+03	1.90E+05
trans-1,2-Dichloroethene	0.0017	40	2.5470E-07	2.2312E-03	81.78	6.66E-07	6.65E-07	4.32E-05	3.60E+02	--
Ethylbenzene	0.0046	40	6.8919E-07	6.0373E-03	81.78	1.80E-06	1.80E-06	1.17E-04	1.00E+03	1.00E+05
Methylene Chloride	0.0018	40	2.6968E-07	2.3624E-03	81.78	7.05E-07	7.04E-07	4.58E-05	2.70E+01	4.10E+04
Tetrachloroethene	2.100	40	3.1463E-04	2.7561E+00	81.78	8.22E-04	8.21E-04	5.34E-02	7.50E-02	8.10E+04
Toluene	0.0072	40	1.0787E-06	9.4496E-03	81.78	2.82E-06	2.82E-06	1.83E-04	2.00E+03	8.90E+04
Trichlorotrifluoroethane	0.00097	40	1.4533E-07	1.2731E-03	81.78	3.80E-07	3.79E-07	2.47E-05	9.00E+04	1.80E+06
Trichlorofluoromethane	0.0084	40	1.2585E-06	1.1025E-02	81.78	3.29E-06	3.29E-06	2.14E-04	7.00E+02	5.60E+05
Trichloroethene	0.047	40	7.0417E-06	6.1685E-02	81.78	1.84E-05	1.84E-05	1.19E-03	4.50E-01	3.30E+04
1,1,1-Trichloroethane	0.0077	40	1.1536E-06	1.0106E-02	81.78	3.01E-06	3.01E-06	1.96E-04	1.00E+03	4.50E+05
m,p-Xylene	0.028	40	4.1950E-06	3.6749E-02	81.78	1.10E-05	1.10E-05	7.12E-04	3.00E+02	1.00E+05
o-Xylene	0.028	40	4.1950E-06	3.6749E-02	81.78	1.10E-05	1.10E-05	7.12E-04	7.00E+02	1.00E+05

Court Street Garage SVE System
January 1998





MARCOR Remediation, Inc.
52 Marway Circle
Rochester, New York 14624

716-247-6955
716-247-6852 (FAX)
800-388-5933

September 4, 1997

Mr. Joseph Biondolillo, Environmental Specialist
City of Rochester
Department of Environmental Services
Office of the Commissioner
Division of Environmental Quality
30 Church Street, Room 300B
Rochester, New York 14614-1278

RE: Court Street Garage SVE System O/M Services
MARCOR Job Number RO-00950-034

Dear Mr. Biondolillo:

Please find the following a summary of work completed by MARCOR at the above referenced site on July 28, 1997.

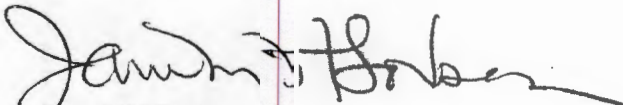
MARCOR conducted site inspections on a quarterly basis to inspect and maximize the system operation and to record vacuum, effluent and air flow levels. System air effluent samples were also taken on a quarterly basis and analyzed by Paradigm Environmental Services, Inc. (ELAP ID# 11221) for T-014 analysis. Per your request MARCOR has suspended all future site visits pending contract renewal.

07/28/97 Inspected site and system. Recorded system vacuum, moisture separator vacuum and effluent levels. Checked moisture separator (empty). Maximized system. Quarterly sampled system effluent.

Laboratory analysis results indicate a general increase in contaminant levels. A complete copy of laboratory results is included in this report.

Please feel free to contact me at (716) 247-6955 ext. 212 with any further questions or concerns.

Sincerely,
MARCOR Remediation, Inc.


Jane MH Forbes
Project Manager

Enclosure

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125 Wolf Road
Albany, NY 122105
518-482-8419

402 Vulcan Street
Buffalo, NY 14207
716-447-0700

52 Marway Circle
Rochester, NY 14624
716-247-6955

13 Dwight Park Drive
Syracuse, NY 13209
315-451-6046

**PARADIGM
Environmental
Services, Inc.**

RO-00950-034 (B)

179 Lake Avenue Rochester, New York 14608 716-647-2530 FAX 716- 647-3311


Client: Marcor Remediation
Client Job Site: Court Street
Rochester, New York
Client Job No.: RO-00950-034
Field Location: VES Effluent
Field ID No.: N/A

Lab Project No.: GE7146
Lab Sample No.: 19133
Sample Type: Summa Canister
Date Sampled: 7/28/97
Date Received: 7/28/97

Compound	Result ug/m3	Reporting Limit ug/m3	Result ppb	Reporting Limit ppb
Chloromethane	1.6	1.0	0.77	0.49
Vinyl Chloride	ND	1.0	ND	0.39
Chloroethane	6.8	1.0	2.60	0.38
Bromomethane	ND	1.0	ND	0.26
Acetone	21	1.0	8.8	0.42
Trichlorofluoromethane	8.4	1.0	1.5	0.18
1,1-Dichloroethene	ND	1.0	ND	0.25
Methylene Chloride	1.8	1.0	0.53	0.29
Carbon Disulfide	18	1.0	5.9	0.32
Trichlorotrifluoroethane	0.97TR	1.0	0.13TR	0.13
trans-1,2-Dichloroethene	1.7	1.0	0.43	0.25
cis-1,2-Dichloroethene	57	1.0	15.0	0.25
1,1-Dichloroethane	ND	1.0	ND	0.25
Methyl tert-Butyl Ether	ND	1.0	ND	0.28
Vinyl Acetate	ND	1.0	ND	0.28
2-Butanone	4.4	1.0	1.5	0.34
Chloroform	17	1.0	3.4	0.21
1,2-Dichloroethane	ND	1.0	ND	0.25
1,1,1-Trichloroethane	7.7	1.0	3.4	0.21
Benzene	1.1	1.0	0.36	0.21
Carbon Tetrachloride	200.0	1.0	32	0.16
1,2-Dichloropropane	ND	1.0	ND	0.22
Bromodichloromethane	ND	1.0	ND	0.15
Trichloroethene	47	1.0	8.8	0.19
cis-1,3-Dichloropropene	ND	1.0	ND	0.22
4-Methyl-2-pentanone	ND	1.0	ND	0.24

ELAP ID No.:11221

Comments: TR = Detected Below Indicated Reporting Limit
ND = Not Detected

Approved By: 
Laboratory Director

File ID: GE7146T2.XLS

**PARADIGM
Environmental
Services, Inc.**

179 Lake Avenue Rochester, New York 14608 716-647-2530 FAX 716- 647-3311

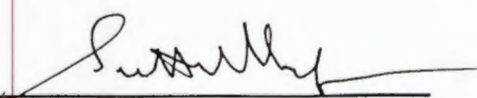
Client: **Marcor Remediation**
 Client Job Site: Court Street
 Rochester, New York
 Client Job No.: RO-00950-034
 Field Location: VES Effluent
 Field ID No.: N/A

Lab Project No.: GE7146
 Lab Sample No.: 19133
 Sample Type: Summa Canister
 Date Sampled: 7/28/97
 Date Received: 7/28/97

Compound	Result ug/m3	Reporting Limit ug/m3	Result ppb	Reporting Limit ppb
trans-1,3-Dichlorpropene	ND	1.0	ND	0.22
1,1,2-Trichloroethane	ND	1.0	ND	0.19
Toluene	7.2	1.0	1.9	0.27
Dibromochloromethane	ND	1.0	ND	0.12
2-Hexanone	ND	1.0	ND	0.24
1,2-Dibromoethane	ND	1.0	ND	0.13
Tetrachloroethene	2,100	1.0	310	0.15
Chlorobenzene	ND	1.0	ND	0.22
Ethylbenzene	4.6	1.0	1.1	0.23
Bromoform	ND	1.0	ND	0.1
Styrene	ND	1.0	ND	0.24
m-&p-Xylenes	28.0	1.0	6.5	0.23
o-Xylene	28.0	1.0	6.4	0.23
1,1,2,2-Tetrachloroethane	ND	1.0	ND	0.15
1,3-Dichlorobenzene	ND	1.0	ND	0.17
1,4-Dichlorobenzene	ND	1.0	ND	0.17
1,2-Dichlorobenzene	ND	1.0	ND	0.17
Napthalene	ND	1.0	ND	0.19

ELAP ID No.:11221

Comments: TR = Detected Below Indicated Reporting Limit
 ND = Not Detected

Approved By: 
 Laboratory Director

File ID: GE7146T2.XLS



Performance Analytical Inc.
Air Quality Laboratory

RESULTS OF ANALYSIS
PAGE 1 OF 2

Client : Paradigm Environmental Services, Inc.

Client Sample ID : N/A
PAI Sample ID : Method Blank

Test Code : GC/MS EPA TO-14
Analyst : Chris Casteel
Instrument : HP 5989A/Bioch 7000
Matrix : Summa Canister

Date Sampled : N/A
Date Received : N/A
Date Analyzed : 8/15/97
Volume(s) Analyzed : 1.000 Liter(s)

Pi 1 = 0.0
Pf 1 = 0.0

D.F. = 1.00

CAS #	COMPOUND	RESULT (UG/M3)	REPORTING LIMIT (UG/M3)	RESULT (PPB)	REPORTING LIMIT (PPB)
74-87-3	Chloromethane	ND	1.0	ND	0.49
75-01-4	Vinyl Chloride	ND	1.0	ND	0.39
75-00-3	Chloroethane	ND	1.0	ND	0.38
74-83-9	Bromomethane	ND	1.0	ND	0.26
67-64-1	Acetone	ND	1.0	ND	0.42
75-69-4	Trichlorofluoromethane	ND	1.0	ND	0.18
75-35-4	1,1-Dichloroethene	ND	1.0	ND	0.25
75-09-2	Methylene chloride	ND	1.0	ND	0.29
75-15-0	Carbon Disulfide	ND	1.0	ND	0.32
76-13-1	Trichlorotrifluoroethane	ND	1.0	ND	0.13
156-60-5	trans-1,2-Dichloroethene	ND	1.0	ND	0.25
156-59-2	cis-1,2-Dichloroethene	ND	1.0	ND	0.25
75-34-3	1,1-Dichloroethane	ND	1.0	ND	0.25
1634-04-4	Methyl tert-Butyl Ether	ND	1.0	ND	0.28
108-05-4	Vinyl Acetate	ND	1.0	ND	0.28
78-93-3	2-Butanone	ND	1.0	ND	0.34
67-66-3	Chloroform	ND	1.0	ND	0.21
107-06-2	1,2-Dichloroethane	ND	1.0	ND	0.25
71-55-6	1,1,1-Trichloroethane	ND	1.0	ND	0.19
71-43-2	Benzene	ND	1.0	ND	0.31
56-23-5	Carbon Tetrachloride	ND	1.0	ND	0.16
78-87-5	1,2-Dichloropropane	ND	1.0	ND	0.22

TR = Detected Below Indicated Reporting Limit
ND = Not Detected

Verified by : KA

Date : 8/18/97



Performance Analytical Inc.
Air Quality Laboratory

RESULTS OF ANALYSIS
PAGE 2 OF 2

Client : Paradigm Environmental Services, Inc.

Client Sample ID : N/A
PAI Sample ID : Method Blank

Test Code : GC/MS EPA TO-14
Analyst : Chris Castool
Instrument : HP 5989A/Batech 7000
Matrix : Summa Canister
Date Sampled : N/A
Date Received : N/A
Date Analyzed : 8/15/97
Volume(s) Analyzed : 1.000 Liter(s)

Pi 1 = 0.0
Pf 1 = 0.0

D.F. = 1.00

CAS #	COMPOUND	RESULT (UG/M3)	REPORTING LIMIT (UG/M3)	RESULT (PPB)	REPORTING LIMIT (PPB)
75-27-4	Bromodichloromethane	ND	1.0	ND	0.15
79-01-6	Trichloroethene	ND	1.0	ND	0.19
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	ND	0.22
108-10-1	4-Methyl-2-pentanone	ND	1.0	ND	0.24
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	ND	0.22
79-00-5	1,1,2-Trichloroethane	ND	1.0	ND	0.19
108-88-3	Toluene	ND	1.0	ND	0.27
124-48-1	Dibromochloromethane	ND	1.0	ND	0.12
591-78-6	2-Hexanone	ND	1.0	ND	0.24
106-93-4	1,2-Dibromoethane	ND	1.0	ND	0.13
127-18-4	Tetrachloroethene	ND	1.0	ND	0.15
108-90-7	Chlorobenzene	ND	1.0	ND	0.22
100-41-4	Ethylbenzene	ND	1.0	ND	0.23
75-25-2	Bromoform	ND	1.0	ND	0.10
100-42-5	Styrene	ND	1.0	ND	0.24
1330-20-7	m,p-Xylenes	ND	1.0	ND	0.23
95-47-6	o-Xylene	ND	1.0	ND	0.23
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ND	0.15
541-73-1	1,3-Dichlorobenzene	ND	1.0	ND	0.17
106-46-7	1,4-Dichlorobenzene	ND	1.0	ND	0.17
95-50-1	1,2-Dichlorobenzene	ND	1.0	ND	0.17
91-20-3	Naphthalene	ND	1.0	ND	0.19

TR = Detected Below Indicated Reporting Limit
ND = Not Detected

Verified by : 8/18/97

Date : KA