



City of Rochester

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

February 17, 1999

Todd M. Caffoe, P.E.
Environmental Engineer II - Division Environmental 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 is the soil vapor extraction system (SVES) air monitoring and sampling data regarding the quarterly sampling event at the above-referenced property (Site). Marcor Remediation, Inc. (Marcor) measured SVES vacuum and vapor effluent concentrations for each individual cell (i.e., loop) and the complete SVES.

In accordance with the approved SVES Operation and Maintenance Plan, one air sample of the SVES air effluent was collected on November 19, 1998. This sample was analyzed for volatile organic compounds (VOCs) via NIOSH method T-014. According to the analytical results, a total of ten VOCs were detected, including a maximum of 540 ug/m³ of tetrachloroethene (i.e., perchloroethylene or PCE). Table 2a 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 2a, 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 of the SVES in 1996. As the graph illustrates, the concentration of contaminants detected in the SVES air effluent samples continues to vary.

Quarterly monitoring and sampling will continue at this Site. If you have any questions or comments regarding this monitoring report, please call me at 428-6649.

Sincerely,
Division of Environmental Quality

Joseph J. Biondolillo
Joseph J. Biondolillo
Environmental Specialist

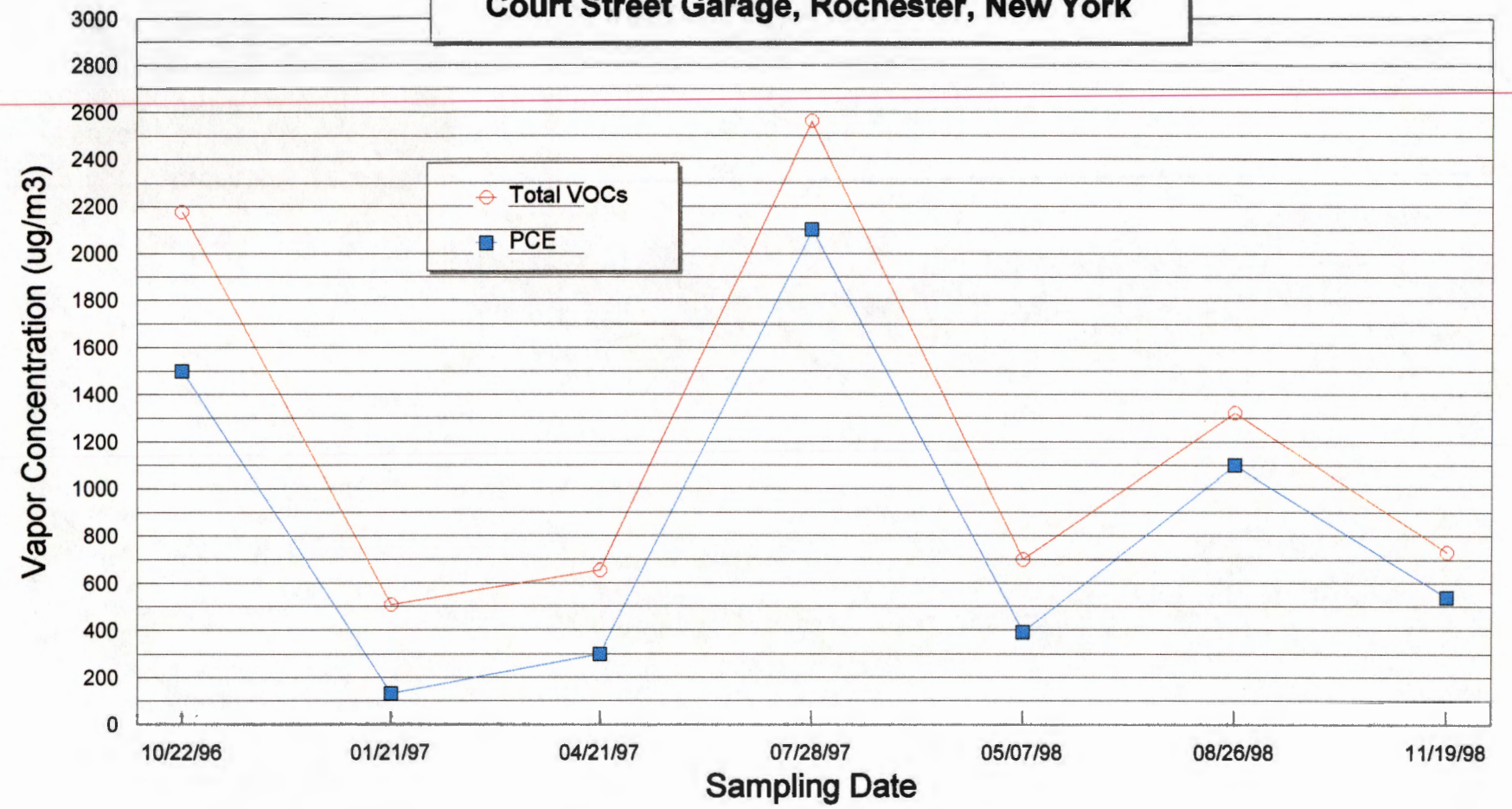
c: Mark Gregor, City of Rochester (w/o enclosures)
Joseph Albert, MCDOH
Dave Napier, NYSDOH

jb288

EEO Employer/Handicapped



SVES Effluent Sampling Results Court Street Garage, Rochester, New York





MARCOR Remediation, Inc.
52 Marway Circle
Rochester, NY 14624

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

January 20, 1999

Mr. Joseph Biondolillo, Environmental Specialist
City of Rochester Department of Environmental Services
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. A copy of the SVE System flow optimization chart and laboratory results is enclosed for your review.

- 11/18/98 The site and system were inspected. The system was not running upon arrival. The knockout was full. Restarted the system after draining the knockout. The system would only run in "Hand" mode. The system's vacuum and effluent levels were recorded and the system was maximized. Groundwater was vacuumed into the knockout during the isolation of cells A, B and D. The system was adjusted and the water was drained from the knockout. No measurable vapor concentrations were recorded from the drained water. The system effluent was sampled and analyzed by Paradigm Environmental Services, Inc. (ELAP ID Number 11221) by Method T-014.
- 12/11/98 Inspected the site and system. The system was running upon arrival. The water knockout was found to be full and leaking. The knockout was drained and the float switch was repaired. The system would now run in "Auto" mode and shut down if the knockout fills again.

The next Quarterly sampling event will be scheduled for February, 1999. Please feel free to contact me at (716) 247-6955 ext. 4212 with any questions or concerns.

Sincerely,
MARCOR Remediation, Inc.

Jane MH Forbes
Project Manager

Enclosure
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125 Wolf Road
Albany, NY 12205
(518) 482-8499

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

④

SVE Operation and Maintenance Log
City of Rochester - Court St. Garage
Marcor Job Number RO-00950-034

Date: 11/18/98

- Vacuum (inches of water) @ blower: 8.0
- Vacuum (inches of water) @ Moisture Separator: 0.4
- Volume of water drained from Moisture Separator: 100% Full
- Effluent VOC Concentration (ppm): 22
- Moisture Separator VOC Concentration: 0.0

Notes: System down upon arrival, drained water knockout
System would not run on Auto position - ran system on HAND
mode - will have mechanic check system

Condition	Vacuum @ Blower	Vacuum @ Separator	Vacuum @ Cell A	Vacuum @ Cell B	Vacuum @ Cell C	Vacuum @ Cell D	Effluent	% Open at MAX
As Was	8.0	0.4	/	/	/	/	22ppm	/
Cell A Only	9.0	1.4-10+	X				33	100%
Cell B Only	9.0	1.5-10+					17	50%
Cell C Only	8.0	0.4					20	50%
Cell D Only	10.0	1.4-4					49	100%
Maximized	8.0	0.4					28	X

RO-00950-084 (3)

**PARADIGM
Environmental
Services, Inc.**

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

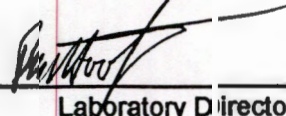
Client: Marcor Remediation
Client Job Site: COR - Court St. Garage
Rochester, New York
Client Job No.: R000950034
Field Location: VES Effluent
Field ID No.: SE8-0871

Lab Project No.: 98-2156
Lab Sample No.: 7530
Sample Type: Summa Canister
Date Sampled: 11/19/98
Date Received: 11/20/98

Compound	Result ug/m3	Reporting Limit ug/m3	Result ppb	Reporting Limit ppb
Chloromethane	ND	5.0	ND	2.4
Vinyl Chloride	ND	5.0	ND	2.0
Chloroethane	ND	5.0	ND	1.3
Bromomethane	ND	5.0	ND	1.9
Acetone	17 TR	20	7.1 TR	8.4
Trichlorofluoromethane	ND	5.0	ND	0.89
1,1-Dichloroethene	ND	5.0	ND	1.3
Methylene Chloride	ND	5.0	ND	1.4
Carbon Disulfide	6.5	5.0	ND	1.6
Trichlorotrifluoroethane	ND	5.0	ND	0.65
trans-1,2-Dichloroethene	ND	5.0	ND	1.3
cis-1,2-Dichloroethene	90	5.0	23	1.3
1,1-Dichloroethane	ND	5.0	ND	1.2
Methyl tert-Butyl Ether	ND	5.0	ND	1.4
Vinyl Acetate	ND	5.0	ND	1.4
2-Butanone	ND	10	ND	3.4
Chloroform	9.5	5.0	2.0	1.0
1,2-Dichloroethane	ND	5.0	ND	1.2
1,1,1-Trichloroethane	ND	5.0	ND	0.92
Benzene	ND	5.0	ND	1.6
Carbon Tetrachloride	11	5.0	1.7 TR	0.80
1,2-Dichloropropane	ND	5.0	ND	1.1
Bromodichloromethane	ND	5.0	ND	0.76
Trichloroethene	34	5.0	6.3	0.93
cis-1,3-Dichloropropene	ND	5.0	ND	1.1
4-Methyl-2-pentanone	ND	5.0	ND	2.4

ELAP ID No.:11221

Comments TR = Detected Below Indicated Reporting Limit
ND = Not Detected
Date Analyzed:12/1/98

Approved By: 
Laboratory Director

File ID: TO1498-2156

**PARADIGM
Environmental
Services, Inc.**

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

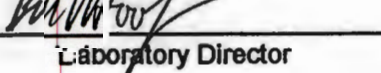
Client: Marcor Remediation
Client Job Site: COR - Court St. Garage
Rochester, New York
Client Job No.: R000950034
Field Location: VES Effluent
Field ID No.: SE8-0871

Lab Project No.: 98-2156
Lab Sample No.: 7530
Sample Type: Summa Canister
Date Sampled: 11/19/98
Date Received: 11/20/98

Compound	Result ug/m3	Reporting Limit ug/m3	Result ppb	Reporting Limit ppb
trans-1,3-Dichloropropene	ND	1.0	ND	1.1
1,1,2-Trichloroethane	ND	1.0	ND	0.92
Toluene	3.9 TR	1.0	1.0 TR	1.3
Dibromochloromethane	ND	1.0	ND	0.59
2-Hexanone	ND	1.0	ND	2.4
1,2-Dibromoethane	ND	1.0	ND	0.65
Tetrachloroethene	540	1.0	80	0.74
Chlorobenzene	ND	1.0	ND	1.1
Ethylbenzene	ND	1.0	ND	1.2
Bromoform	ND	1.0	ND	0.48
Styrene	ND	1.0	ND	1.2
m-&p-Xylenes	9.9	1.0	2.3	1.2
o-Xylene	8.7	1.0	2.0	1.2
1,1,2,2-Tetrachloroethane	ND	1.0	ND	0.73
1,3-Dichlorobenzene	ND	1.0	ND	0.83
1,4-Dichlorobenzene	ND	1.0	ND	0.83
1,2-Dichlorobenzene	ND	1.0	ND	0.83
Naphthalene	*			

ELAP ID No.:11221

Comments: TR == Detected Below Indicated Reporting Limit
ND := Not Detected
Date Analyzed: 12/1/98
* Instrument not calibrated for Naphthalene, Naphthalene was not observed in the run.

Approved By: 
Laboratory Director

File ID: TO1498-2156

**PARADIGM
Environmental
Services, Inc.**

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

Client: Marcor Remediation
Client Job Site: COR - Court St. Garage
Rochester, New York
Client Job No.: R000950034
Field Location: N/A
Field ID No.: N/A

Lab Project No.: 98-2158
Lab Sample No.: Method Blank
Sample Type: Summa Canister
Date Sampled: N/A
Date Received: N/A

Compound	Result ug/m3	Reporting Limit ug/m3	Result ppb	Reporting Limit ppb
Chloromethane	ND	5.0	ND	2.4
Vinyl Chloride	ND	5.0	ND	2.0
Chloroethane	ND	5.0	ND	1.3
Bromomethane	ND	5.0	ND	1.9
Acetone	ND	5.0	ND	8.4
Trichlorofluoromethane	ND	5.0	ND	0.89
1,1-Dichloroethene	ND	5.0	ND	1.3
Methylene Chloride	ND	5.0	ND	1.4
Carbon Disulfide	ND	5.0	ND	1.6
Trichlorotrifluoroethane	ND	5.0	ND	0.65
trans-1,2-Dichloroethene	ND	5.0	ND	1.3
cis-1,2-Dichloroethene	ND	5.0	ND	1.3
1,1-Dichloroethane	ND	5.0	ND	1.2
Methyl tert-Butyl Ether	ND	5.0	ND	1.4
Vinyl Acetate	ND	5.0	ND	1.4
2-Butanone	ND	5.0	ND	3.4
Chloroform	ND	5.0	ND	1.0
1,2-Dichloroethane	ND	5.0	ND	1.2
1,1,1-Trichloroethane	ND	5.0	ND	0.92
Benzene	ND	5.0	ND	1.6
Carbon Tetrachloride	ND	5.0	ND	0.80
1,2-Dichloropropane	ND	5.0	ND	1.1
Bromodichloromethane	ND	5.0	ND	0.76
Trichloroethene	ND	5.0	ND	0.93
cis-1,3-Dichloropropene	ND	5.0	ND	1.1
4-Methyl-2-pentanone	ND	5.0	ND	2.4

ELAP ID No.:11221

Comments TR = Detected Below Indicated Reporting Limit
NID = Not Detected
Date Analyzed: 12/1/98

Approved By: _____


Laboratory Director

File ID: TO14982156BLK

**PARADIGM
Environmental
Services, Inc.**

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


Client: Marcor Remediation
Client Job Site: COR - Court St. Garage
Rochester, New York
Client Job No.: R000950034
Field Location: N/A
Field ID No.: N/A

Lab Project No.: 98-2158
Lab Sample No.: Method Blank
Sample Type: Summa Canister
Date Sampled: N/A
Date Received: N/A

Compound	Result ug/m3	Reporting Limit ug/m3	Result ppb	Reporting Limit ppb
trans-1,3-Dichloropropene	ND	5.0	ND	1.1
1,1,2-Trichloroethane	ND	5.0	ND	0.92
Toluene	ND	5.0	ND	1.3
Dibromochloromethane	ND	5.0	ND	0.59
2-Hexanone	ND	5.0	ND	2.4
1,2-Dibromoethane	ND	5.0	ND	0.65
Tetrachloroethene	ND	5.0	ND	0.74
Chlorobenzene	ND	5.0	ND	1.1
Ethylbenzene	ND	5.0	ND	1.2
Bromoform	ND	5.0	ND	0.48
Styrene	ND	5.0	ND	1.2
m-&p-Xylenes	ND	5.0	ND	1.2
o-Xylene	ND	5.0	ND	1.2
1,1,2,2-Tetrachloroethane	ND	5.0	ND	0.73
1,3-Dichlorobenzene	ND	5.0	ND	0.83
1,4-Dichlorobenzene	ND	5.0	ND	0.83
1,2-Dichlorobenzene	ND	5.0	ND	0.83
Naphthalene	*			

ELAP ID No.:11221

Comments: TR = Detected Below Indicated Reporting Limit
ND = Not Detected
Date Analyzed: 12/1/98
* Instrument not calibrated for Naphthalene, Naphthalene was not observed in the rug.

Approved By: 
Laboratory Director

File ID: TO14982156BLK

PARADIGM ENVIRONMENTAL SERVICES, INC.

179 Lake Avenue
 Rochester, NY 14608
 (716) 647-2530 • (800) 724-1997
 FAX (716) 647-3311

CHAIN OF CUSTODY

REPORT TO:		INVOICE TO:		LAB PROJECT #
COMPANY	Marcot Remediation	COMPANY	Same	98-2156
ADDRESS	52 Marway Circle	ADDRESS		
CITY	Rochester	CITY		P.O. # 20656
STATE	NY	STATE		
ZIP	14624	ZIP		
ATT.	Doug Stamp	ATT.		
PHONE#	(716) 247-6955	PHONE#		
FAX#	(716) 247-6852	FAX#		<input type="checkbox"/> ADDENDUM
PROJECT NAME/SITE NAME: COR - Court St. Garage				
COMMENTS:				
PROJECT #: R000950034		TURN AROUND TIME (WORKING DAYS): <input type="checkbox"/> ONE <input type="checkbox"/> THREE <input checked="" type="checkbox"/> FIVE (STD) <input type="checkbox"/> OTHER		
REPRESENTATIVE:				

DATE	TIME	COMPOSITE	GRAB	SAMPLE LOCATION/FIELD ID	MATRIX	CONTAINER NUMBER	REQUESTED ANALYSIS												REMARKS	PARADIGM LAB SAMPLE NUMBER	ANALYTICAL COSTS
							1	2	3	4	5	6	7	8	9	10	11	12			
11-19-98	1000		X	YES Effluent SEB-0871	Air	1	X												7530		
2																					
3																					
4																					
5																					
6																					
7																					
8																					
9																					
10																					
11																					
12																					

RELINQUISHED BY:	DATE/TIME	RECEIVED BY:	DATE/TIME	SAMPLE CONDITION	CHECK #	TOTAL COST
Douglas Stamp	11-19-98/1600	[Signature]	11/19/98/1600			
RELINQUISHED BY:	DATE/TIME	RECEIVED BY:	DATE/TIME	CARRIER COMPANY	AIR BILL NO.	P.I.F.
[Signature]	11/20/98 1445	[Signature]	11/20/98 2:45pm			
RELINQUISHED BY:	DATE/TIME	RECEIVED @ LAB BY:	DATE/TIME	CARRIER PHONE #	DATE RESULTS REPORTED BY:	DATE/TIME
[Signature]		[Signature]	11/20/98 5:25			

WHITE COPY-SAMPLE YELLOW COPY-FILE PINK COPY-RELINQUISHER