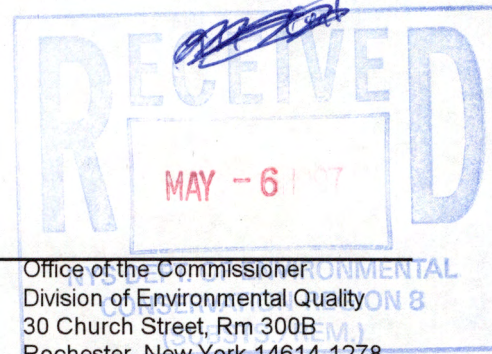




City of Rochester



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

May 1, 1997

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 #2 - Court Street Garage Soil Vapor Extraction System
Rochester, New York

Dear Mr. Caffoe:

Enclosed are the soil vapor (venting) extraction system (SVES) air monitoring data and sampling results for the quarterly sampling at the above-referenced site. Marcor Environmental Remediation, Inc. (Marcor) measured SVES vacuum and vapor effluent concentrations for each individual cell (i.e., loop), as well as the entire SVES. The SVES effluent vapor concentrations were measured with a Foxboro OVA 128 flame ionization detector (FID).

In accordance with the approved SVES Operation and Maintenance Plan, one air sample of the SVES air effluent was collected on January 21, 1977. This sample was analyzed for volatile organic compounds (VOCs) via NIOSH method T-014. According to the analytical results, ten VOCs were detected, ranging in concentration from 6.8 ug/m³ to a maximum of 270 ug/m³ (cis-1,2-dichloroethene). Tetrachloroethene (i.e., perchloroethylene or PCE) was detected at a concentration of 130 ug/m³. 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). Based on the analytical results, treatment of the SVES air effluent is not required at this time. It should be noted that most VOC concentrations, including PCE, have declined since the first sampling event in October 1996.

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 Albert, MCDOH
Dave Napier, NYSDOH

EEO Employer/Handicapped



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

Today's Date:

05/01/97

Sample Date:

01/21/97

Sampled by:

Marcor

Detected Contaminant	Effluent Air	Air Flow cfm	Emissions lb/hr	Annual	Stack Height (ft)	Max. Act. Annual	Max.Pot. Annual	Max. Short-Term	AGC ug/m3	SGC ug/m3
	Concentration mg/m3			Emissions lb/yr		Impact Ca ug/m3	Impact Cp ug/m3	Impact Cst ug/m3		
2-Butanone (MEK)	0.0082	40	1.2286E-06	1.0762E-02	81.78	3.21E-06	3.21E-06	2.08E-04	3.00E+02	1.40E+05
Carbon Tetrachloride	0.017	40	2.5470E-06	2.2312E-02	81.78	6.66E-06	6.65E-06	4.32E-04	7.00E-02	1.30E+03
Chloroform	0.008	40	1.1986E-06	1.0500E-02	81.78	3.13E-06	3.13E-06	2.03E-04	2.30E+01	9.80E+02
cis-1,2-Dichloroethene	0.27	40	4.0452E-05	3.5436E-01	81.78	1.06E-04	1.06E-04	6.86E-03	1.90E+03	1.90E+05
Tetrachloroethene	0.130	40	1.9477E-05	1.7062E-01	81.78	5.09E-05	5.08E-05	3.30E-03	7.50E-02	8.10E+04
Toluene	0.011	40	1.6481E-06	1.4437E-02	81.78	4.31E-06	4.30E-06	2.80E-04	2.00E+03	8.90E+04
Trichloroethene	0.035	40	5.2438E-06	4.5936E-02	81.78	1.37E-05	1.37E-05	8.90E-04	4.50E-01	3.30E+04
1,1,1-Trichloroethane	0.0089	40	1.3334E-06	1.1681E-02	81.78	3.48E-06	3.48E-06	2.26E-04	7.00E+02	4.50E+05
m,p-Xylene	0.014	40	2.0975E-06	1.8374E-02	81.78	5.48E-06	5.48E-06	3.56E-04	3.00E+03	1.00E+05
o-Xylene	0.0068	40	1.0188E-06	8.9247E-03	81.78	2.66E-06	2.66E-06	1.73E-04	7.00E+02	1.00E+05

RO00950 034

④

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

Date: 1-21-97

- Vacuum (inches of water) @ blower: 3/7

- Vacuum (inches of water) @ Moisture Separator: 0.5/0.6

- Volume of water drained from Moisture Separator: 20+ gals.

- Effluent VOC Concentration (ppm): 12/13

- Moisture Separator VOC Concentration: 0.0

Notes: _____

Condition	Vacuum @ Blower	Vacuum @ Separator	Vacuum @ Cell A	Vacuum @ Cell B	Vacuum @ Cell C	Vacuum @ Cell D	Effluent	% Open
As Was	3	0.5	2	0	0	6	12	
Cell A Only	8	1	1	6	/	/	6.4	50
Cell B Only	10-14	2+ water	0	0-6	/	/	7	50
Cell C Only	10	0.6	/	/	0	/	7.6	75
Cell D Only	10	1.2	/	/	/	0	14	100
Maximized	7	0.6	0	0	0	0	13	/

**PARADIGM
Environmental
Services, Inc.**

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

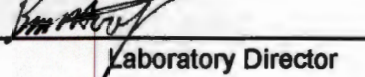
Client: **Marcor Remediation**
Client Job Site: Court Street
Rochester, New York
Client Job No.: RO-00950-034
Field Location: VES Effluent
Field ID No.: SE7-0005

Lab Project No.: GE6172
Lab Sample No.: 16321
Sample Type: Summa Canister
Date Sampled: 1/21/97
Date Received: 1/21/97

Compound	Result ug/m3	Reporting Limit ug/m3	Result ppb	Reporting Limit ppb
Chloromethane	ND	10.00	ND	4.80
Vinyl Chloride	ND	10.00	ND	3.90
Chloroethane	ND	10.00	ND	2.60
Bromomethane	ND	10.00	ND	3.80
Acetone	ND	10.00	ND	4.20
Trichlorofluoromethane	ND	10.00	ND	1.80
1,1-Dichloroethene	ND	10.00	ND	2.50
Methylene Chloride	ND	10.00	ND	1.30
Carbon Disulfide	ND	10.00	ND	3.20
Trichlorotrifluoroethane	ND	10.00	ND	1.30
trans-1,2-Dichloroethene	ND	10.00	ND	2.50
cis-1,2-Dichloroethene	270	10.00	68.00	2.50
1,1-Dichloroethane	ND	10.00	ND	2.50
Methyl tert-Butyl Ether	ND	10.00	ND	2.80
Vinyl Acetate	ND	10.00	ND	2.80
2-Butanone	8.2TR	10.00	2.8TR	3.40
Chloroform	8.0TR	10.00	1.6TR	2.00
1,2-Dichloroethane	ND	10.00	ND	2.50
1,1,1-Trichloroethane	8.9TR	10.00	1.6TR	1.80
Benzene	ND	10.00	ND	3.10
Carbon Tetrachloride	17.0	10.00	2.7	1.60
1,2-Dichloropropane	ND	10.00	ND	2.20
Bromodichloromethane	ND	10.00	ND	1.50
Trichloroethene	35	10.00	6.6	1.90
cis-1.3-Dichloropropene	ND	10.00	ND	2.20
4-Methyl-2-pentanone	ND	10.00	ND	2.40

ELAP ID No.:11221

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

Approved By: 
Laboratory Director

File ID: GE6172.XLS

**PARADIGM
Environmental
Services, Inc.**

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

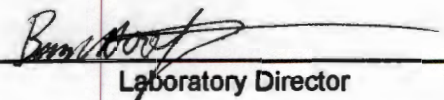
Client: Marcor Remediation
Client Job Site: Court Street
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Field Location: VES Effluent
Field ID No.: SE7-0005

Lab Project No.: GE6172
Lab Sample No.: 16321
Sample Type: Summa Canister
Date Sampled: 1/21/97
Date Received: 1/21/97

Compound	Result ug/m3	Reporting Limit ug/m3	Result ppb	Reporting Limit ppb
trans-1,3-Dichlorpropene	ND	4.00	ND	2.2
1,1,2-Trichloroethane	ND	4.00	ND	1.8
Toluene	11	4.00	2.9	2.7
Dibromochloromethane	ND	4.00	ND	1.2
2-Hexanone	ND	4.00	ND	2.4
1,2-Dibromoethane	ND	4.00	ND	1.3
Tetrachloroethene	130	4.00	19	1.5
Chlorobenzene	ND	4.00	ND	2.2
Ethylbenzene	ND	4.00	ND	2.3
Bromoform	ND	4.00	ND	0.97
Styrene	ND	4.00	ND	2.3
m-&p-Xylenes	14.00	4.00	3.2	2.3
o-Xylene	6.8TR	4.00	1.6TR	2.3
1,1,2,2-Tetrachloroethane	ND	4.00	ND	1.5
1,3-Dichlorobenzene	ND	4.00	ND	1.7
1,4-Dichlorobenzene	ND	4.00	ND	1.7
1,2-Dichlorobenzene	ND	4.00	ND	1.7

ELAP ID No.:11221

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

Approved By: 
Laboratory Director

File ID: GE6172.XLS

Form Updated: 10/08/91

GE6172

MARCOR

CHAIN OF CUSTODY

LABORATORY NAME: PERFORMANEE ANALYTICAL
 ANALYSIS DUE DATE: _____

CLIENT		PROJECT NAME & NUMBER					NUMBER OF CONTAINERS	TYPE OF ANALYSIS				DEPTH TO WATER	GROUNDWATER ELEVATION	P.O.#:
MARCOR - City of Reeth		COURT ST B000 950-034												
SAMPLE PRESERVE	DATE	TIME	COMP.	GRAB	SAMPLE LOCATION:								SAMPLE TYPE, SAMPLE # & COMMENTS.	
None	1-21-97	1536		X	VES SEE SET-0005		1	X						Air Canister

REMARKS:

SAMPLED BY: Paul Willey / Rob Yarger PROJECT MANAGER: _____

RELINQUISHED BY:	1 <u>Paul Willey</u> SIGN 1/21/97 4:15 DATE TIME	2 <u>Rob Yarger</u> SIGN 1/21/97 4:45 DATE TIME	3 _____ SIGN _____ DATE TIME	4 _____ SIGN _____ DATE TIME
RECEIVED BY:	<u>Paul Willey</u> SIGN 1/21/97 4:15 DATE TIME	<u>Rob Yarger</u> SIGN 1/21/97 4:45 DATE TIME	3 _____ SIGN _____ DATE TIME	4 _____ SIGN _____ DATE TIME

METHOD OF SHIPMENT: _____ RECEIVED AT LABORATORY BY: [Signature]
 DATE: 1/21/97 TIME: 4:45 PM