

File

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

January 28, 2000

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

RECEIVED

FEB 1 2000

DER/HAZ. WASTE REMED
REGION 8

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

Dear Mr. Caffoe:

Please find enclosed the soil vapor extraction system (SVES) air monitoring and sampling data recorded during the last quarterly sampling event at the above-referenced property (Site) which took place on January 10, 2000. City of Rochester personnel 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, air sample of the SVES air effluent was collected on January 10, 2000. The sample was analyzed for volatile organic compounds (VOCs) via NIOSH method T-014. According to the analytical results, a total of fourteen (14) VOCs were detected from the sample. Tetrachloroethene (i.e., perchloroethylene or PCE) was detected at the highest concentration (230 ug/m³). Table 2a summarizes the concentrations 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 428-7892.

Sincerely,
Division of Environmental Quality

Jane MH Forbes
Environmental Technician

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

EEO Employer/Handicapped



City of Rochester - DEQ
 Court Street Garage DEQ 99051
 SVE Operation and Maintenance Log

Date: 1/10/00

Initial Vacuum at blower (" water): + 50" H₂O (after draining = 10" H₂O)

Initial Vacuum at Moisture Separator (" water): -

Volume of water in Separator (gallons): full 50+ gallons - no sheen; no odor.

Effluent VOC Concentrations (ppm): 0.0 ppm (PID)

Moisture Separator Liquid VOC Concentration (ppm): 0.0 ppm

Notes: _____

* Initial Conditions ⇒ 75% 100% 50% 50%

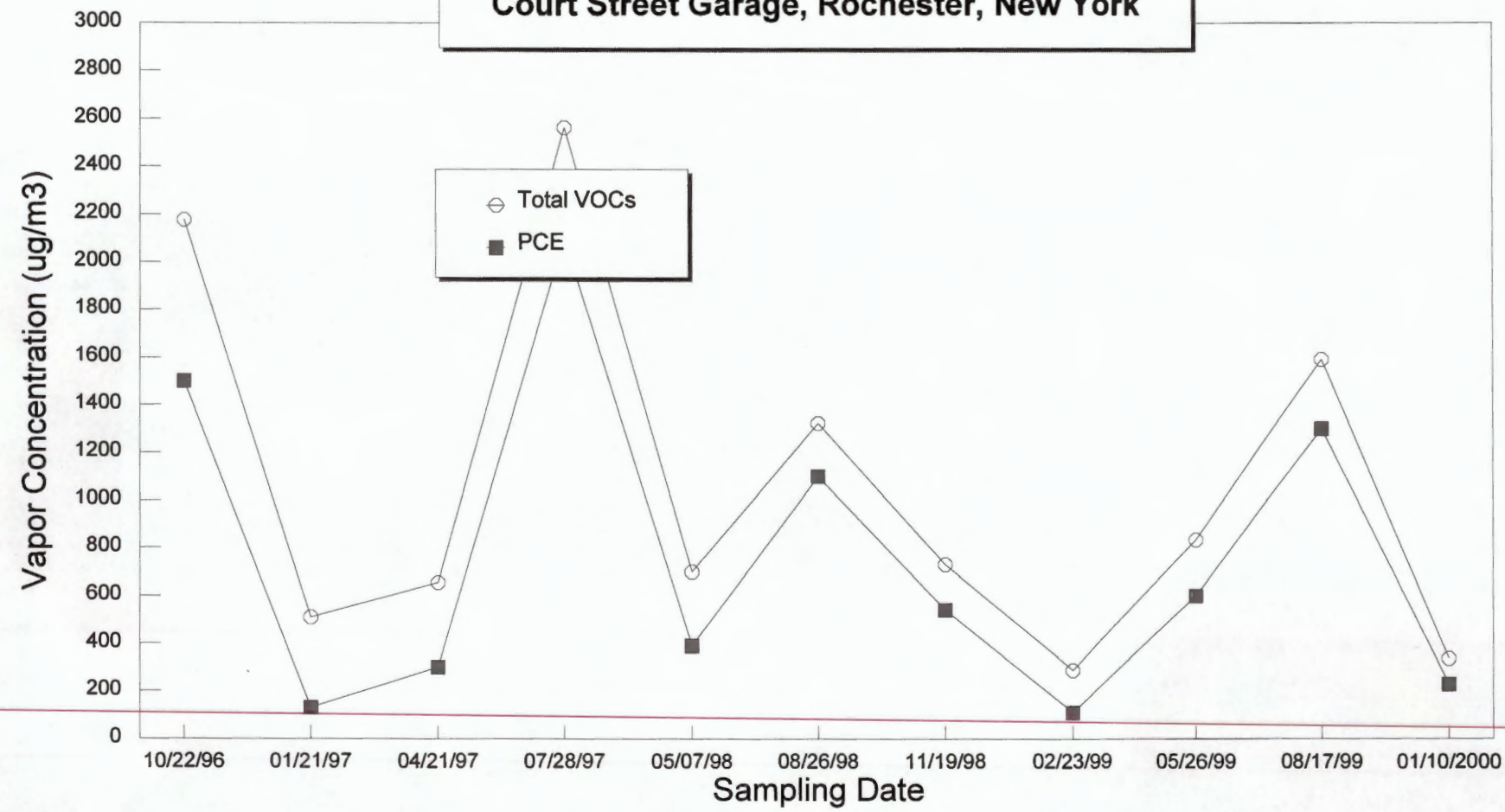
Condition	Vac @ Blower	Vac @ Separator	Vac @ Cell A	Vac @ Cell B	Vac @ Cell C	Vac @ Cell D	Effluent	% Open
* Initial	+ 50"						0.0	*
Cell A Only	15"	sucked H ₂ O					5.9	100
Cell B Only	12"	sucked H ₂ O					7.6	100
Cell C Only	9"						2.0	100
Cell D Only	9.5"	sucked H ₂ O					2.4	100
Maximized	9.0						2.9	

max Conditions ⇒ 25% 25% 50% 50%

TABLE 2a, Court Street Garage Soil Vent System 94 Air Guide-1 Permit Comparisons

Today's Date:										
01/28/2000										
Sample Date:										
01/10/2000										
Sampled by:										
Marcor Remediation, Inc.										
	Effluent Air			Annual	Stack	Max. Act. Annual	Max.Pot. Annual	Max. Short-Term		
Detected	Concentration	Air Flow	Emissions	Emissions	Height	Impact Ca	Impact Cp	Impact Cst	AGC	SGC
Contaminant	mg/m3	cfm	lb/hr	lb/yr	(ft)	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3
Acetone	0.0052	77	1.4997E-06	1.3138E-02	81.78	3.92E-06	3.91E-06	2.54E-04	1.40E+04	1.40E+05
Carbon Disulfide	0.0014	77	4.0377E-07	3.5371E-03	81.78	1.06E-06	1.05E-06	6.85E-05	7.00E+00	7.10E+02
Carbon Tetrachloride	0.003	77	8.9407E-07	7.8321E-03	81.78	2.34E-06	2.33E-06	1.52E-04	7.00E-02	1.30E+03
Chloroform	0.0047	77	1.3555E-06	1.1874E-02	81.78	3.54E-06	3.54E-06	2.30E-04	2.30E+01	9.80E+02
cis-1,2-Dichloroethene	0.062	77	1.7881E-05	1.5664E-01	81.78	4.67E-05	4.67E-05	3.03E-03	1.90E+03	1.90E+05
Methylene Chloride	0.00160	77	4.6146E-07	4.0423E-03	81.78	1.21E-06	1.20E-06	7.83E-05	2.70E+01	4.10E+04
Tetrachloroethene	0.230	77	6.6334E-05	5.8109E-01	81.78	1.73E-04	1.73E-04	1.13E-02	7.50E-02	8.10E+04
Toluene	0.0039	77	1.1248E-06	9.8532E-03	81.78	2.94E-06	2.94E-06	1.91E-04	2.00E+03	8.90E+04
trans-1,2-Dichloroethene	0.0009	77	2.5957E-07	2.2738E-03	81.78	6.78E-07	6.78E-07	4.40E-05	1.90E+03	1.90E+05
Trichloroethene	0.018	77	5.1914E-06	4.5476E-02	81.78	1.36E-05	1.36E-05	8.81E-04	4.50E-01	3.30E+04
1,1,1-Trichloroethane	0.0009	77	2.5957E-07	2.2738E-03	81.78	6.78E-07	6.78E-07	4.40E-05	1.00E+03	4.50E+05
Trichlorofluoromethane	0.0019	77	5.4798E-07	4.8003E-03	81.78	1.43E-06	1.43E-06	9.30E-05	7.00E+02	5.60E+05
m,p-Xylene	0.0017	77	4.9030E-07	4.2950E-03	81.78	1.28E-06	1.28E-06	8.32E-05	3.00E+02	1.00E+05
o-Xylene	0.00096	77	2.7687E-07	2.4254E-03	81.78	7.24E-07	7.23E-07	4.70E-05	7.00E+02	1.00E+05

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



PARADIGM
Environmental
Services, Inc.

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

Client: City of Rochester
Client Job Site: Court Street Garage
Rochester, New York
Client Job No.: DEQ 99051
Field Location: VES Effluent
Field ID No.: N/A

Lab Project No.: 00-0139
Lab Sample No.: 1074
Sample Type: Summa Canister
Date Sampled: 01/10/2000
Date Received: 01/10/2000

Compound	Result ug/m3	Reporting Limit ug/m3	Result ppb	Reporting Limit ppb
Chloromethane	ND	1.0	ND	0.49
Vinyl Chloride	ND	1.0	ND	0.39
Chloroethane	ND	1.0	ND	0.38
Bromomethane	ND	1.0	ND	0.26
Acetone	5.2	1.0	2.2	0.42
Trichlorofluoromethane	1.9	1.0	0.36	0.18
1,1-Dichloroethene	ND	1.0	ND	0.25
Methylene Chloride	1.6	1.0	0.48	0.29
Carbon Disulfide	1.4	1.0	0.44	0.32
Trichlorotrifluoroethane	ND	1.0	ND	0.13
trans-1,2-Dichloroethene	0.90 TR	1.0	0.23 TR	0.25
cis-1,2-Dichloroethene	62	1.0	16	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	ND	1.0	ND	0.34
Chloroform	4.7	1.0	0.97	0.21
1,2-Dichloroethane	ND	1.0	ND	0.25
1,1,1-Trichloroethane	0.90 TR	1.0	0.17 TR	0.19
Benzene	ND	1.0	ND	0.31
Carbon Tetrachloride	3.1	1.0	0.50	0.16
1,2-Dichloropropane	ND	1.0	ND	0.22
Bromodichloromethane	ND	1.0	ND	0.15
Trichloroethene	18	1.0	3.4	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
Date Analyzed: 1/18/2000

Approved By: _____

Laboratory Director

File ID: TO14-00-0139-1074

**PARADIGM
Environmental
Services, Inc.**

179 Lake Avenue Rochester, New York 14606 716-647-2530 FAX 716-647-3311

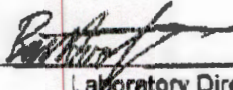
Client: **City of Rochester**
 Client Job Site: Court Street Garage
 Rochester, New York
 Client Job No.: DEQ 99051
 Field Location: VES Effluent
 Field ID No.: N/A

Lab Project No.: 00-0139
 Lab Sample No.: 1074
 Sample Type: Summa Canister
 Date Sampled: 01/10/2000
 Date Received: 01/10/2000

Compound	Result ug/m3	Reporting Limit ug/m3	Result ppb	Reporting Limit ppb
trans-1,3-Dichloropropene	ND	1.0	ND	0.22
1,1,2-Trichloroethane	ND	1.0	ND	0.19
Toluene	3.9	1.0	1.0	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	230	1.0	35	0.15
Chlorobenzene	ND	1.0	ND	0.22
Ethylbenzene	ND	1.0	ND	0.23
Bromoform	ND	1.0	ND	0.10
Styrene	ND	1.0	ND	0.24
m-&p-Xylenes	1.7	1.0	0.40	0.23
o-Xylene	0.95 TR	1.0	0.22 TR	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
Naphthalene	ND	1.0	ND	0.19

ELAP ID No.: 11221

Comments: TR = Detected Below indicated Reporting Limit
 ND = Not Detected
 Date Analyzed: 1/18/2000

Approved By: 
 Laboratory Director

File ID: TO14-00-0139-1074

PARADIGM
Environmental
Services, Inc.

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

Client: City of Rochester

Lab Project No.: 00-0139

Lab Sample No.: N/A

Client Job Site: N/A

Sample Type: Method Blank

Client Job No.: N/A

Date Sampled: N/A

Field Location: N/A

Date Received: N/A

Field ID No.: N/A

Compound	Result ug/m3	Reporting Limit ug/m3	Result ppb	Reporting Limit ppb
Chloromethane	ND	1.0	ND	0.49
Vinyl Chloride	ND	1.0	ND	0.39
Chloroethane	ND	1.0	ND	0.38
Bromomethane	ND	1.0	ND	0.26
Acetone	ND	1.0	ND	0.42
Trichlorofluoromethane	ND	1.0	ND	0.18
1,1-Dichloroethene	ND	1.0	ND	0.25
Methylene Chloride	ND	1.0	ND	0.29
Carbon Disulfide	ND	1.0	ND	0.32
Trichlorotrifluoroethane	ND	1.0	ND	0.13
trans-1,2-Dichloroethene	ND	1.0	ND	0.25
cis-1,2-Dichloroethene	ND	1.0	ND	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	ND	1.0	ND	0.34
Chloroform	ND	1.0	ND	0.21
1,2-Dichloroethane	ND	1.0	ND	0.25
1,1,1-Trichloroethane	ND	1.0	ND	0.19
Benzene	ND	1.0	ND	0.31
Carbon Tetrachloride	ND	1.0	ND	0.16
1,2-Dichloropropane	ND	1.0	ND	0.22
Bromodichloromethane	ND	1.0	ND	0.15
Trichloroethane	ND	1.0	ND	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

Date Analyzed: 1/17/2000

Approved By: _____

Laboratory Director

File ID: TO14-00.0139-MELK

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	City of Rochester	COMPANY		00 -00-0139
ADDRESS	30 Church St. Rm 300B	ADDRESS		
CITY	Rochester	CITY		P.O.#
STATE	NY	STATE		
PHONE#	428-7892	PHONE#		
FAX#	428-6010	FAX#		<input type="checkbox"/> ADDENDUM

PROJECT NAME(S) SITE NAME(S)
COR-911 Bldg
COR-Court St. Garage
PROJECT #
DEQ 98090
DEQ 99051

COMMENTS:

TURN AROUND TIME (WORKING DAYS) ONE THREE FIVE (STD) OTHER _____
REPRESENTATIVE: *J. Jones* *2 weeks TAT*

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
1	1/10/00	1100A		✓ Court St. Garage SVE eff.	Air	1													1074	
2	1/10/00	300A		✓ 911 Bldg SVE effluent	Air	1													1075	
3																				
4																				
5																				
6																				
7																				
8																				
9																				
10																				
11																				
12																				

RELINQUISHED BY: <i>Jamie H. Forbes</i>	DATE/TIME: 1/10/00 3:25	RECEIVED BY:	DATE/TIME:	SAMPLE CONDITION:	CHECK #	TOTAL COST
RELINQUISHED BY:	DATE/TIME:	RECEIVED BY:	DATE/TIME:	CARRIER COMPANY:	AIR BILL NO.	P.I.F.
RELINQUISHED BY:	DATE/TIME:	RECEIVED BY: <i>[Signature]</i>	DATE/TIME: 1/10/00 3:10pm	CARRIER PHONE #:	DATE RESULTS REPORTED BY:	DATE/TIME:

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

01/26/00 13:38 716 647 3311 PARADIGM 008/008