MONTHLY PROGRESS REPORT

Rochester Fire Academy Site
1190 Scottsville Road
Rochester, New York 14624

Site Number # 828015

Reporting Period: June 2013

Prepared By:

City of Rochester
Division of Environmental Quality
30 Church Street
Rochester, NY 14614

Introduction and Background

The NYSDEC requested that the City of Rochester (City) complete a Periodic Review Report (PRR) and also certify that applicable Engineering Controls (EC) and Institutional Controls (IC) for the Rochester Fire Academy Site (Site No. 828015) are still in place and functioning as designed. The reporting period in the PRR was listed as March 1, 2006 through December 31, 2012.

The Rochester Fire Academy (RFA) Site located at 1190 Scottsville Road, Rochester, New York consists of four distinct areas as illustrated on Figure 1 in Attachment #1:

- North Disposal Area (NDA),
- Southern Disposal Area (SDA),
- Training Grounds Area (TGA)
- Police Obstacle Course and Firing Range (PFR)

The NDA, TGA, and SDA were involved in historical chemical use and disposal. The Genesee Valley Park Area (GVPA) adjacent to the eastern perimeter of the Site was also found to contain elevated contaminant concentrations in the soil and was also included in the remedial effort. A series of remedial investigations of the Site was performed in the early to mid-1990s. A Record of Decision (ROD) was issued in March 1993 that required the following remedial measures be implemented at the RFA Site:

- Excavation and treatment of contaminated soils in the SDA and TGA followed by on-site soil conditioning and on-site disposal in the NDA. Off-site disposal of a smaller volume of contaminated soils was also completed.
- Excavation and placement of GVP A soils in the NDA.
- Restoration of the remediation areas (SDA, TGA, and GVP A) and the capping of the NDA.
- Groundwater collection and treatment in the SDA consists of an approximate 200-foot long (approximately 191-foot installed), 22-foot deep groundwater collection trench.

The remedial measures listed above were implemented by the City in the mid to late 1990s. Subsequent to completion of the intrusive remedial measures, the SDA was backfilled with clean fill and the ground surface was restored using six inches of seeded topsoil. TGA grades were reestablished with clean fill up to a prevailing grade of 523 feet above mean sea level (msl) in the eastern portion of the area and to 522 feet above msl in the western portion, which is above the 100-year flood elevation calculated at that time. An asphalt cover system was placed over the TGA under a separate Monroe County Construction contract for the Aircraft Rescue Firefighting Facility (ARFF) project. The GVPA was remediated and then backfilled with clean fill and the asphalt bicycle path was replaced. The NDA was cleared and grubbed, and fill and soil excavated from GVPA, SDA and TGA were placed in the NDA. A composite synthetic/soil cover system consisting of a 6-inch sand layer, followed by a 40-mil HDPE synthetic membrane, a geocomposite drainage layer, 24-inches of barrier soil, and 6-inches of seeded topsoil was placed over the NDA fill. Storm water drainage was provided in the TGA, NDA and PFR.

The groundwater collection system installed in the SDA consists of a 191-foot long, 22-foot deep groundwater collection trench installed in the saturated zone within the overburden. The trench consists of two layers of gravel with a slotted 6-inch collection pipe that slopes from the manhole at each end to the centrally placed sump (i.e., pumping station) which is approximately 24-feet deep.

Groundwater containing volatile organic compounds (VOCs) is collected in the sump and pumped to the on-site treatment system located in a metal building located on the southwestern portion of the SDA. Groundwater from the collection trench is conveyed to the treatment system via a PVC pipeline. The groundwater treatment system currently utilizes air stripping remove VOCs from the collected groundwater. Effluent is collected in a discharge tank prior to being pumped to the sanitary sewer in accordance with a Groundwater Treatment System Sewer Use Permit issued by Monroe County Pure Waters.

In 1998 a declaration of covenant and restrictions was filed with the Monroe County Clerk's Office for the Site in accordance with the Consent Order. These Institutional Controls were established in order to give notice to the public and bind any successors in title to the provisions in the consent order.

As stated in an email dated March 26, 2013 from the City to Ms. Valerie Woodward, Engineering Geologist, NYSDEC, Albany, New York, the nearly 15 year old groundwater recovery and treatment system at the Rochester Fire Academy Site has been essentially inoperable for more than a year due to ongoing equipment failures and operating problems, compounded by what appears to be the need for comprehensive system-wide maintenance including de-scaling of equipment and process piping. As a result of these issues, the Periodic Review Report and IC and EC certifications cannot be fully completed at the current time. As a result, the City understands the NYSDEC has put the RFA Site in a Corrective Measures status.

In an email dated March 27, 2013 the NYSDEC requested that the City prepare and submit monthly progress reports summarizing the progress of the Corrective Measures accomplished during the reporting period, and summarizing anticipated tasks and activities which will be completed for the next month. Progress reports will be submitted to NYSDEC DER on a monthly basis. Each monthly progress report will be submitted approximately one week after the monthly reporting period until a point in time when the corrective measures have resulted in full compliance with existing requirements. At that point, monthly progress reports will be terminated and annual reporting and certification will be completed as required.

1. Significant Activities Completed During Reporting Period (June 2013)

The significant activities and tasks completed during the month of June 2013 are summarized below.

1.1. The City operated the SDA groundwater treatment plant in an automated mode for the month of June 2013. No significant operating issues were experienced during the month of June 2013. The water level in the SDA groundwater collection sump is approximately 20 feet below grade, consistent with plant recommended operating specifications.

1.2. As stated in a July 9, 2013 letter from City DEQ to Monroe County DES, Division of Pure Waters, the SDA groundwater treatment plant total effluent volume for the month of June 2013 was 232,844 gallons. The total effluent volume for the calendar year 2013 through June 30, 2013 was 470,531 gallons. A copy of this letter is attached as Attachment 2.

1.3. Monthly effluent permit sampling was performed by City DEQ on June 14, 2013. Laboratory analyses indicate that the effluent discharge concentrations were below the industrial sewage discharge permit limits. Copies of the June 14, 2013 laboratory analysis results are also attached as Attachment 2.

1.3.1. Collected depth to groundwater measurements from the MW-7 and MW-9 series monitoring wells and piezometers in proximity to the groundwater collection trench to document the drawdown in the overburden groundwater table to evaluate the hydraulic capture zone and radius of influence of the groundwater recovery trench.

1.3.2. Summarized analytical laboratory results for groundwater samples on May 22, 2013 collected as part of the required semi-annual groundwater sampling event from on-site monitoring wells. The summary table and Paradigm Environmental Services, Inc. laboratory analytical sampling report dated May 30, 2013 is attached as Attachment 3.

1.3.3. The City issued a Request for Proposal dated July 1, 2013 to Day Environmental, Inc. (DAY) for professional services associated with completing the remaining portions of the PRR and SDA groundwater plant upgrades and enhancements. The DAY proposal scope of work which includes recommendations for groundwater treatment system upgrades and modifications to reduce downtime and maintenance costs, and improve system operational efficiency is included in Attachment 4.

2. **Pending Project Activities During the Next Reporting Period (July 2013)**

During the next month (July 2013) the following tasks and activities will be performed:

2.1. Continue testing and inspection of SDA groundwater treatment system equipment and components, and continuing making equipment repairs and conducting routine maintenance efforts.

2.2. Continue to operate the SDA groundwater treatment system in an automated mode. Continue to collect static water level measures from monitoring wells, the sump in the groundwater recovery trench, and the two recovery trench piezometers to document the hydraulic control under typical operating condition.

2.3. Continue to review of documentation applicable to Site remediation, including Record of Decision, the OM&M plans, construction "As-Built" plans, NYSDEC PRR and IC/EC requirements pertaining to the Site, and a review of associated Site monitoring and analytical data for purposes of determining compliance status with remedial requirements.

2.4. Development of a proposal identifying the tasks and additional costs to address: (1) recommended groundwater treatment plant upgrades and modifications to operate the system in an automated mode; and (2) Site remedial compliance documentation requirements including Periodic Review Report and IC/EC Certification submittals. As indicated in the previous Progress Report, a second proposal from DAY will be executed to fully implement the compliance plan sometime around July 1, 2013.

3. Schedule

No significant deviations or delays were encountered during the month of June 2013.

A schedule of projected tasks, including inspections, repairs and maintenance activities for the RFA Site has been developed and is included as Attachment #5. This schedule will be revised on a monthly basis as deemed warranted based on the actual scope for work required or performed, and to account for any anticipated delays or due to unanticipated change in scope.

Attachment #1

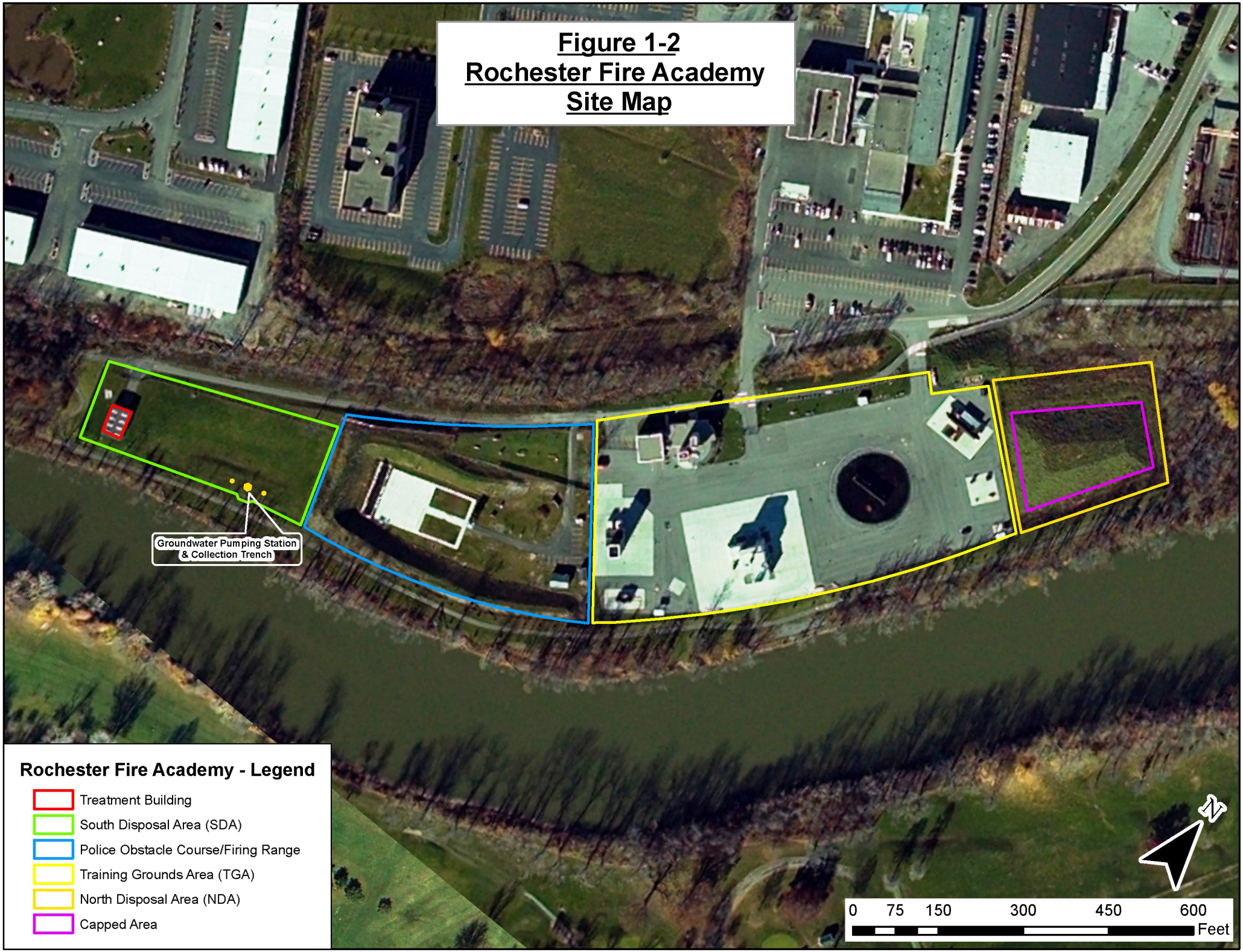


Figure 1-2
Rochester Fire Academy
Site Map
Groundwater Pumping Station & Collection Trench
Rochester Fire Academy - Legend
Treatment Building
South Disposal Area (SDA)
Police Obstacle Course/Firing Range
Training Grounds Area (TGA)
North Disposal Area (NDA)
Capped Area
N
0 75 150 300 450 600
Feet

Attachment #2

City of Rochester
Office of the Commissioner
Department of Environmental Services
City Hall Room 300B, 30 Church Street
Rochester, New York 14614-1290
www.cityofrochester.gov

one city ROCHESTER Division of Environmental Quality

July 9, 2013

Monroe County DES
Division of Pure Waters
145 Paul Rd. Building 10
Rochester, New York 14624
Attn: Sean Keenan

Re: Rochester Fire Academy Effluent Totals and
Permit #705 Sampling Results
June 2013- revised

Dear Mr. Keenan:

Attached please find the total effluent readings for the treatment plant at the above referenced site. The total effluent volume for the month of June 2013 was 232,844 gallons. The total effluent volume for the calendar year 2013 through June 30 was 470,531 gallons. Copies of the Log sheets for June 2013 are included with this package.

Monthly effluent permit sampling was performed on June 14, 2013. Laboratory analyses indicate that the effluent discharge concentrations were below allowable contaminant concentrations. Copies of the June 14, 2013 laboratory analysis results are attached. Please feel free to contact me at (585) 428-6884 if you have any questions.

Sincerely,
Division of Environmental Quality

Dennis M. Peck
Environmental Technician

cc: file

G:\ENVQUAL\DENNIS\Jobs\Rochester Fire Academy\Monthly Update letters\Update 102 - June 2013 revised.docx

Rochester Fire Academy Weekly Log

	M	T	W	Th	F	M	T
Date	6/3/13	6/4/13	6/5/13	6/6/13	6/7/13	6/10/13	6/11/13
Daily Influent Meter Reading (gal)	8046645	8053917	8059284	8066000	8093071	8127825	8135000
Total Influent since 1/1/2010 (gal)							
Daily Effluent Meter Reading (gal)	8252677	8259471	8264062	8271630	8298357	8332597	8341189
Total Effluent since 1/1/2010 (gal)							
Building Inlet Gauge (gpm)	46E	46W	45E		46E	46W	46E
Lead Bag Filter Inlet/ Outlet (psi)	5/7	5/7	5/7		5/7	5/7	5/7
Lag Bag Filter Inlet/Outlet (psi)	0/2	0/2	0/2		0/2	0/2	0/2
Feed Tank Pump (5 to 20 psi)	6	6	6		6	6	6
Air Stripper Pressure (psi)	12	12	12	12	12	12	
Pump 400 (psi)	19	19	19	19	19	19	
Pump 401 (psi)	24	24	24	23	23	23	
Carbon Drum 300 (inlet/outlet)							
Carbon Drum 301 (inlet/outlet)							
Carbon Drum 302 (inlet/outlet)							
Carbon Drum 303 (inlet/outlet)							
Carbon Drum 304 (inlet/outlet)							
Carbon Drum 305 (inlet/outlet)							
Carbon Drum 306 (inlet/outlet)							
Carbon Drum 307 (inlet/outlet)							
Sequestering Agent Level (inches)	44.7	44.6	44.4	44.2	43.7	42.7	42.7
Visual Inspection NDA	✓	✓	✓	✓	✓	✓	✓
Visual Inspection TGA	✓	✓	✓	✓	✓	✓	✓
Cleaned/Changed Bag Filter #1	–	–	–	–	–	–	–
Cleaned/Changed Bag Filter #2	–	–	–	–	–	–	–
Cleaned Feed/ Discharge Tanks	–	–	–	–	–	–	–
Performed **Monthly**/Quarterly Sampling	–	–	–	–	–	–	–
Tested Sump Pump Operation	–	–	–	–	–	–	–
Cleaned Sump and Drain	✓	–	–	–	–	✓	–
Additional Tasks/ Notes:							
ON:	-20	-20	-20	-20	-20	-20	-20
OFF:	-15	-15	-15	-15	-15	-15	-15

6/6/13 Th Rain most of day >1" Total (Th)

6/11/13 Tue Steady rain in AM

6/12/13

Rochester Fire Academy Weekly Log

	W	Th	F	M	T	W	Th
Date	6/12/13	6/13/13	6/14/13	6/17/13	6/18/13	6/19/13	6/20/13
Daily Influent Meter Reading (gal)	8142950	8150142	8173503	8199213	8208569	8215791	8224356
Total Influent since 1/1/2010 (gal)							
Daily Effluent Meter Reading (gal)	8348364	8355452	8378000	8404133	8413624	8421245	8429656
Total Effluent since 1/1/2010 (gal)							
Building Inlet Gauge (gpm)		46E			46E		46/w
Lead Bag Filter Inlet/ Outlet (psi)		5/7			5/7		5/7
Lag Bag Filter Inlet/Outlet (psi)		0/2			0/2		0/2
Feed Tank Pump (5 to 20 psi)		6			6		7
Air Stripper Pressure (psi)			12	12	12		
Pump 400 (psi)			19	19	19		
Pump 401 (psi)			22	22	22		
Carbon Drum 300 (inlet/outlet)							
Carbon Drum 301 (inlet/outlet)							
Carbon Drum 302 (inlet/outlet)							
Carbon Drum 303 (inlet/outlet)							
Carbon Drum 304 (inlet/outlet)							
Carbon Drum 305 (inlet/outlet)							
Carbon Drum 306 (inlet/outlet)							
Carbon Drum 307 (inlet/outlet)							
Sequestering Agent Level (inches)	42.6	42.2	41.7	41.1	40.9	40.7	40.5
Visual Inspection NDA	✓	✓	✓	✓	✓	✓	✓
Visual Inspection TGA	✓	✓	✓	✓	✓	✓	✓
Cleaned/Changed Bag Filter #1	–	–	–	–	–	–	–
Cleaned/Changed Bag Filter #2	–	–	–	–	–	–	–
Cleaned Feed/ Discharge Tanks	–	–	–	–	–	–	–
Performed Monthly/Quarterly Sampling	–	–	✓	–	–	–	–
Tested Sump Pump Operation	–	–	–	–	–	–	–
Cleaned Sump and Drain	✓	–	–	–	–	–	–
Additional Tasks/ Notes:							
ON:	-20	-20	-20	-20	-20	-20	-20
OFF:	-15	-15	-15	-15	-15	-15	-15

6/12/13 clear + 75°

6/13/13 very rainy — NYSDEC site visit

6/14 - 6/17 Mostly dry

6/18 - 6/19 cool + dry

6/20 warm + sun

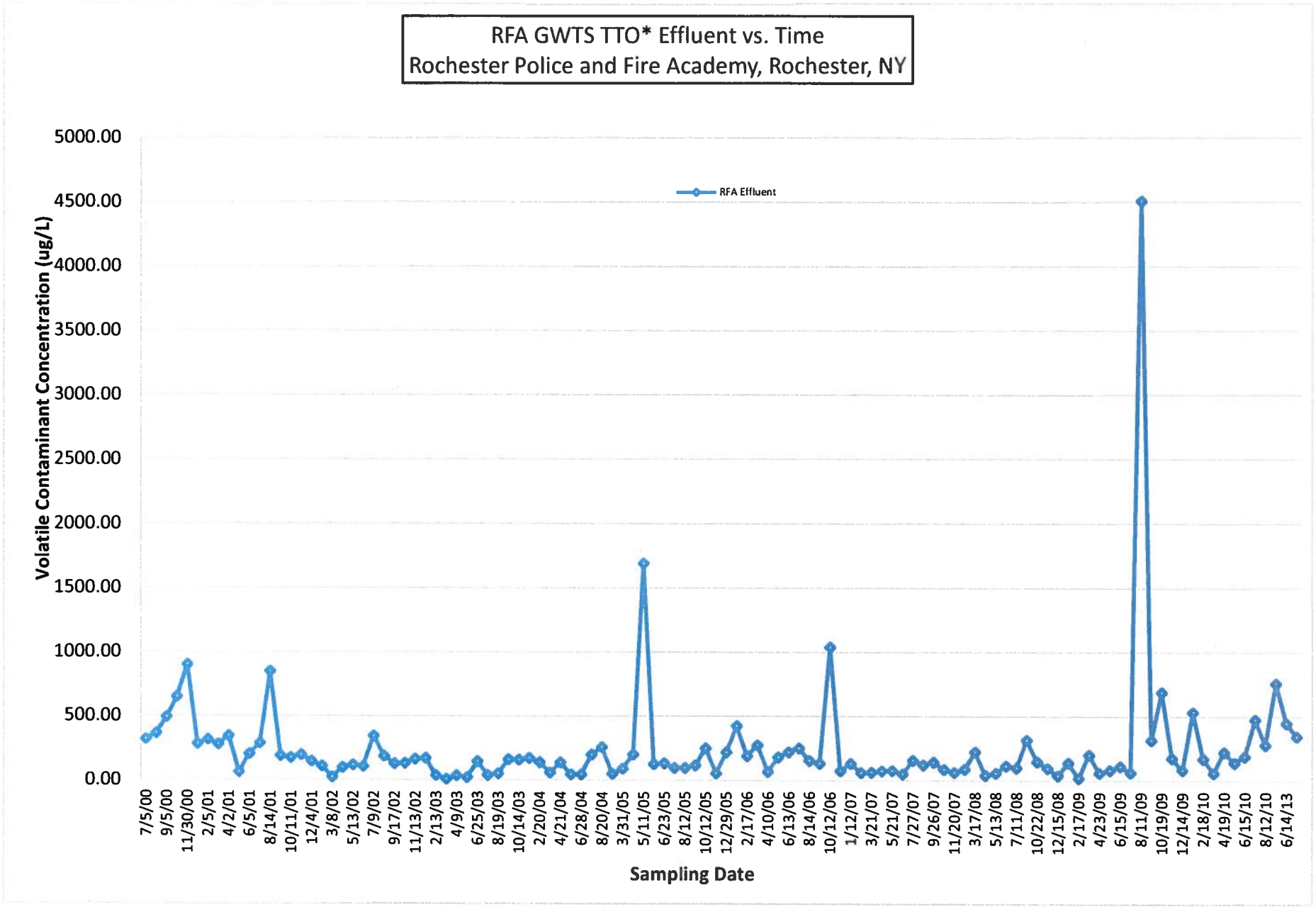
Rochester Fire Academy Weekly Log

F M T W TR F

Date	6/21/13	6/24/13	6/25/13	6/26/13	6/27/13	6/28/13	6/30/13
Daily Influent Meter Reading (gal)	8229906	8248758	8253852	8259720	8264809	8270284	8280421
Total Influent since 1/1/2010 (gal)							
Daily Effluent Meter Reading (gal)	8434362	8453508	8459242	8464499	8470187	8475052	8485521
Total Effluent since 1/1/2010 (gal)							
Building Inlet Gauge (gpm)		46W			46F		
Lead Bag Filter Inlet/ Outlet (psi)		5/7			5/7		
Lag Bag Filter Inlet/Outlet (psi)		0/2			0/2		
Feed Tank Pump (5 to 20 psi)		7			7		
Air Stripper Pressure (psi)							
Pump 400 (psi)							
Pump 401 (psi)							
Carbon Drum 300 (inlet/outlet)							
Carbon Drum 301 (inlet/outlet)							
Carbon Drum 302 (inlet/outlet)							
Carbon Drum 303 (inlet/outlet)							
Carbon Drum 304 (inlet/outlet)							
Carbon Drum 305 (inlet/outlet)							
Carbon Drum 306 (inlet/outlet)							
Carbon Drum 307 (inlet/outlet)							
Sequestering Agent Level (inches)	40.2	39.7	39.7	39.6	39.6		
Visual Inspection NDA	✓	✓	✓	✓	✓	✓	✓
Visual Inspection TGA	✓	✓	✓	✓	✓	✓	✓
Cleaned/Changed Bag Filter #1	—	—	—	—	—	—	—
Cleaned/Changed Bag Filter #2	—	—	—	—	—	—	—
Cleaned Feed/ Discharge Tanks	—	—	—	—	—	—	—
Performed **Monthly**/Quarterly Sampling	—	—	—	—	—	—	—
Tested Sump Pump Operation	—	—	—	—	—	—	—
Cleaned Sump and Drain	—	—	—	—	—	—	—
Additional Tasks/ Notes:							
ON:	-20	-20	-20	-20	-20	-20	-20
OFF:	-15	-15	-15	-15	-15	-15	-15

6/21-6/24 Hot + dry 6/25 Occasional shower 6/26 dry
Rainy June

Graph 3


RFA GWTS TTO* Effluent vs. Time
Rochester Police and Fire Academy, Rochester, NY
RFA Effluent
Volatile Contaminant Concentration (ug/L)
5000.00
4500.00
4000.00
3500.00
3000.00
2500.00
2000.00
1500.00
1000.00
500.00
0.00
7/5/00
9/5/00
11/30/00
2/5/01
4/2/01
6/5/01
8/14/01
10/11/01
12/4/01
3/8/02
5/13/02
7/9/02
9/17/02
11/13/02
2/13/03
4/9/03
6/25/03
8/19/03
10/14/03
2/20/04
4/21/04
6/28/04
8/20/04
3/31/05
5/11/05
6/23/05
8/12/05
10/12/05
12/29/05
2/17/06
4/10/06
6/13/06
8/14/06
10/12/06
1/12/07
3/21/07
5/21/07
7/27/07
9/26/07
11/20/07
3/17/08
5/13/08
7/11/08
10/22/08
12/15/08
2/17/09
4/23/09
6/15/09
8/11/09
10/19/09
12/14/09
2/18/10
4/19/10
6/15/10
8/12/10
6/14/13
Sampling Date

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Analytical Report For

City of Rochester

For Lab Project ID

132203

Referencing

RFA Monthly Sampling, DEQ-98045

Prepared

Friday, June 28, 2013

Any noncompliant QC parameters or other notes impacting data interpretation are flagged or documented on the final report or are noted below.

Certifies that this report has been approved by the Technical Director or Designee

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.

179 Lake Avenue • Rochester, NY 14608 • (585) 647-2530 • Fax (585) 647-3311 • ELAP ID# 10958

PARADIGM
ENVIRONMENTAL SERVICES, INC

Lab Project ID: 132203

Client: City of Rochester

Project Reference: RFA Monthly Sampling, DEQ-98045

Sample Identifier: Effluent
Lab Sample ID: 132203-01
Matrix: Wastewater

Date Sampled: 6/14/2013
Date Received: 6/14/2013

PCBs

Analyte	Result	Units	Qualifier	Date/Time Analyzed
PCB-1016	< 1.00	ug/L		6/20/2013 7:15:12 AM
PCB-1221	< 1.00	ug/L		6/20/2013 7:15:12 AM
PCB-1232	< 1.00	ug/L		6/20/2013 7:15:12 AM
PCB-1242	< 1.00	ug/L		6/20/2013 7:15:12 AM
PCB-1248	< 1.00	ug/L		6/20/2013 7:15:12 AM
PCB-1254	< 1.00	ug/L		6/20/2013 7:15:12 AM
PCB-1260	< 1.00	ug/L		6/20/2013 7:15:12 AM

Method Reference(s): EPA 608

pH

Analyte	Result	Units	Qualifier	Date/Time Analyzed
pH	8.19 @ 21.5 C	S.U.		6/14/2013 2:40:00 PM

Method Reference(s): SM 4500 H+ B

Semi-Volatile Organics (Acids)

Analyte	Result	Units	Qualifier	Date/Time Analyzed
2,4,6-Trichlorophenol	< 10.0	ug/L		6/19/2013 9:29:00 PM
2,4-Dichlorophenol	< 10.0	ug/L		6/19/2013 9:29:00 PM
2,4-Dimethylphenol	< 10.0	ug/L		6/19/2013 9:29:00 PM
2,4-Dinitrophenol	< 20.0	ug/L		6/19/2013 9:29:00 PM
2-Chlorophenol	< 10.0	ug/L		6/19/2013 9:29:00 PM
2-Nitrophenol	< 10.0	ug/L		6/19/2013 9:29:00 PM
4,6-Dinitro-2-methylphenol	< 20.0	ug/L		6/19/2013 9:29:00 PM
4-Chloro-3-methylphenol	< 10.0	ug/L		6/19/2013 9:29:00 PM
4-Nitrophenol	< 20.0	ug/L		6/19/2013 9:29:00 PM
Pentachlorophenol	< 20.0	ug/L		6/19/2013 9:29:00 PM
Phenol	< 10.0	ug/L		6/19/2013 9:29:00 PM

Method Reference(s): EPA 625
Data File: S70405.D

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 132203

Client: City of Rochester

Project Reference: RFA Monthly Sampling, DEQ-98045

Sample Identifier: Effluent
Lab Sample ID: 132203-01
Matrix: Wastewater

Date Sampled: 6/14/2013
Date Received: 6/14/2013

Semi-Volatile Organics (Base Neutrals)

Analyte	Result	Units	Qualifier	Date/Time Analyzed
1,2,4-Trichlorobenzene	< 10.0	ug/L		6/18/2013 11:04:00 PM
1,2-Dichlorobenzene	< 10.0	ug/L		6/18/2013 11:04:00 PM
1,3-Dichlorobenzene	< 10.0	ug/L		6/18/2013 11:04:00 PM
1,4-Dichlorobenzene	< 10.0	ug/L		6/18/2013 11:04:00 PM
2,4-Dinitrotoluene	< 10.0	ug/L		6/18/2013 11:04:00 PM
2,6-Dinitrotoluene	< 10.0	ug/L		6/18/2013 11:04:00 PM
2-Chloronaphthalene	< 10.0	ug/L		6/18/2013 11:04:00 PM
3,3'-Dichlorobenzidine	< 10.0	ug/L		6/18/2013 11:04:00 PM
4-Bromophenyl phenyl ether	< 10.0	ug/L		6/18/2013 11:04:00 PM
4-Chlorophenyl phenyl ether	< 10.0	ug/L		6/18/2013 11:04:00 PM
Acenaphthene	< 10.0	ug/L		6/18/2013 11:04:00 PM
Acenaphthylene	< 10.0	ug/L		6/18/2013 11:04:00 PM
Anthracene	< 10.0	ug/L		6/18/2013 11:04:00 PM
Benzidine	< 20.0	ug/L		6/18/2013 11:04:00 PM
Benzo (a) anthracene	< 10.0	ug/L		6/18/2013 11:04:00 PM
Benzo (a) pyrene	< 10.0	ug/L		6/18/2013 11:04:00 PM
Benzo (b) fluoranthene	< 10.0	ug/L		6/18/2013 11:04:00 PM
Benzo (g,h,i) perylene	< 10.0	ug/L		6/18/2013 11:04:00 PM
Benzo (k) fluoranthene	< 10.0	ug/L		6/18/2013 11:04:00 PM
Bis (2-chloroethoxy) methane	< 10.0	ug/L		6/18/2013 11:04:00 PM
Bis (2-chloroethyl) ether	< 10.0	ug/L		6/18/2013 11:04:00 PM
Bis (2-chloroisopropyl) ether	< 10.0	ug/L		6/18/2013 11:04:00 PM
Bis (2-ethylhexyl) phthalate	< 10.0	ug/L		6/18/2013 11:04:00 PM
Butylbenzylphthalate	< 10.0	ug/L		6/18/2013 11:04:00 PM
Chrysene	< 10.0	ug/L		6/18/2013 11:04:00 PM
Dibenz (a,h) anthracene	< 10.0	ug/L		6/18/2013 11:04:00 PM
Diethyl phthalate	**13.4**	ug/L		6/18/2013 11:04:00 PM
Dimethyl phthalate	< 20.0	ug/L		6/18/2013 11:04:00 PM

PARADIGM
ENVIRONMENTAL SERVICES, INC

Lab Project ID: 132203

Client: City of Rochester

Project Reference: RFA Monthly Sampling, DEQ-98045

Sample Identifier: Effluent
Lab Sample ID: 132203-01
Matrix: Wastewater

Date Sampled: 6/14/2013
Date Received: 6/14/2013

Di-n-butyl phthalate	< 10.0	ug/L	6/18/2013 11:04:00 PM
Di-n-octylphthalate	< 10.0	ug/L	6/18/2013 11:04:00 PM
Fluoranthene	< 10.0	ug/L	6/18/2013 11:04:00 PM
Fluorene	< 10.0	ug/L	6/18/2013 11:04:00 PM
Hexachlorobenzene	< 10.0	ug/L	6/18/2013 11:04:00 PM
Hexachlorobutadiene	< 10.0	ug/L	6/18/2013 11:04:00 PM
Hexachlorocyclopentadiene	< 10.0	ug/L	6/18/2013 11:04:00 PM
Hexachloroethane	< 10.0	ug/L	6/18/2013 11:04:00 PM
Indeno (1,2,3-cd) pyrene	< 10.0	ug/L	6/18/2013 11:04:00 PM
Isophorone	< 10.0	ug/L	6/18/2013 11:04:00 PM
Naphthalene	< 10.0	ug/L	6/18/2013 11:04:00 PM
Nitrobenzene	< 10.0	ug/L	6/18/2013 11:04:00 PM
N-Nitrosodimethylamine	< 10.0	ug/L	6/18/2013 11:04:00 PM
N-Nitroso-di-n-propylamine	< 10.0	ug/L	6/18/2013 11:04:00 PM
N-Nitrosodiphenylamine	< 10.0	ug/L	6/18/2013 11:04:00 PM
Phenanthrene	< 10.0	ug/L	6/18/2013 11:04:00 PM
Pyrene	< 10.0	ug/L	6/18/2013 11:04:00 PM

Method Reference(s): EPA 625
Data File: S70374.D

Volatile Organics

Analyte	Result	Units	Qualifier	Date/Time Analyzed
1,1,1-Trichloroethane	**107**	ug/L		6/18/2013 5:03:00 PM
1,1,2,2-Tetrachloroethane	< 2.00	ug/L		6/18/2013 5:03:00 PM
1,1,2-Trichloroethane	< 2.00	ug/L		6/18/2013 5:03:00 PM
1,1-Dichloroethane	**67.5**	ug/L		6/18/2013 5:03:00 PM
1,1-Dichloroethene	**3.62**	ug/L		6/18/2013 5:03:00 PM
1,2-Dichlorobenzene	< 2.00	ug/L		6/18/2013 5:03:00 PM
1,2-Dichloroethane	**2.35**	ug/L		6/18/2013 5:03:00 PM
1,2-Dichloropropane	< 2.00	ug/L		6/18/2013 5:03:00 PM
1,3-Dichlorobenzene	< 2.00	ug/L		6/18/2013 5:03:00 PM
1,4-Dichlorobenzene	< 2.00	ug/L		6/18/2013 5:03:00 PM

PARADIGM
ENVIRONMENTAL SERVICES, INC

Lab Project ID: 132203

Client: City of Rochester

Project Reference: RFA Monthly Sampling, DEQ-98045

Sample Identifier: Effluent
Lab Sample ID: 132203-01
Matrix: Wastewater

Date Sampled: 6/14/2013
Date Received: 6/14/2013

2-Chloroethyl vinyl Ether	< 10.0	ug/L	6/18/2013 5:03:00 PM
Benzene	< 0.700	ug/L	6/18/2013 5:03:00 PM
Bromodichloromethane	< 2.00	ug/L	6/18/2013 5:03:00 PM
Bromoform	< 5.00	ug/L	6/18/2013 5:03:00 PM
Bromomethane	< 2.00	ug/L	6/18/2013 5:03:00 PM
Carbon Tetrachloride	< 2.00	ug/L	6/18/2013 5:03:00 PM
Chlorobenzene	< 2.00	ug/L	6/18/2013 5:03:00 PM
Chloroethane	**7.50**	ug/L	6/18/2013 5:03:00 PM
Chloroform	< 2.00	ug/L	6/18/2013 5:03:00 PM
Chloromethane	< 2.00	ug/L	6/18/2013 5:03:00 PM
cis-1,3-Dichloropropene	< 2.00	ug/L	6/18/2013 5:03:00 PM
Dibromochloromethane	< 2.00	ug/L	6/18/2013 5:03:00 PM
Ethylbenzene	< 2.00	ug/L	6/18/2013 5:03:00 PM
Methylene chloride	< 5.00	ug/L	6/18/2013 5:03:00 PM
Tetrachloroethene	< 2.00	ug/L	6/18/2013 5:03:00 PM
Toluene	**4.88**	ug/L	6/18/2013 5:03:00 PM
trans-1,2-Dichloroethene	< 2.00	ug/L	6/18/2013 5:03:00 PM
trans-1,3-Dichloropropene	< 2.00	ug/L	6/18/2013 5:03:00 PM
Trichloroethene	**18.0**	ug/L	6/18/2013 5:03:00 PM
Trichlorofluoromethane	< 2.00	ug/L	6/18/2013 5:03:00 PM
Vinyl chloride	**25.0**	ug/L	6/18/2013 5:03:00 PM

Method Reference(s): EPA 624
Data File: X06121.D

Volatile Organics

Analyte	Result	Units	Qualifier	Date/Time Analyzed
2-Butanone	**40.0**	ug/L		6/18/2013 5:03:00 PM
2-Hexanone	< 5.00	ug/L		6/18/2013 5:03:00 PM
4-Methyl-2-pentanone	**18.8**	ug/L		6/18/2013 5:03:00 PM
Acetone	**46.0**	ug/L		6/18/2013 5:03:00 PM

Method Reference(s): EPA 624
Data File: X06121.D

PARADIGM

PARADIGM
ENVIRONMENTAL SERVICES, INC

Analytical Report Appendix

The reported results relate only to the samples as they have been received by the laboratory.

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All soil/sludge samples have been reported on a dry weight basis, unless qualified "reported as received". Other solids are reported as received.

The Chain of Custody provides additional information, including compliance with sample condition requirements upon receipt. Sample condition requirements are defined under the 2003 NELAC Standard, sections 5.5.8.3.1 and 5.5.8.3.2.

NYSDOH ELAP does not certify for all parameters. Paradigm Environmental Services or the indicated subcontracted laboratory does hold certification for all analytes where certification is offered by ELAP unless otherwise specified. Aliquots separated for certain tests, such as TCLP, are indicated on the Chain of Custody and final reports with an "A" suffix.

Data qualifiers are used, when necessary, to provide additional information about the data. This information may be communicated as a flag or as text at the bottom of the report. Please refer to the following list of analyte-specific, frequently used data flags and their meaning:

"<" = Analyzed for but not detected at or above the quantitation limit.
"E" = Result has been estimated, calibration limit exceeded.
"Z" = See case narrative.
"D" = Sample, Laboratory Control Sample, or Matrix Spike Duplicate results above Relative Percent Difference limit.
"M" = Matrix spike recoveries outside QC limits. Matrix bias indicated.
"B" = Method blank contained trace levels of analyte. Refer to included method blank report.
"V" = Sample concentration is >10 times the spike. No meaningful Spike Recovery can be calculated.
"J" = Result estimated between the quantitation limit and half the quantitation limit.
"L" = Laboratory Control Sample recovery outside accepted QC limits.
"C" = Concentration differs by more than 40% between the primary and secondary analytical columns.

PARADIGM ENVIRONMENTAL SERVICES, INC.

179 Lake Avenue
Rochester, NY 14608
(585) 647-2530 * (800) 724-1997

CHAIN OF CUSTODY

REPORT TO:	INVOICE TO:	
COMPANY: CITY OF ROCHESTER	COMPANY:	LAB PROJECT #: 132203 / CLIENT PROJECT #:
ADDRESS: 30 CHURCH STREET, ROOM 300B	ADDRESS:	
CITY: ROCHESTER STATE: NY ZIP: 14614	CITY: STATE: ZIP:	TURNAROUND TIME: (WORKING DAYS)
PHONE: 585-428-6884 FAX: 585-428-6010	PHONE: FAX:	STD / OTHER
PROJECT NAME/SITE NAME: RFA Monthly sampling DEQ-98045	ATTN: DENNIS PECK	ATTN: 1 2 3 5 / X-10
	COMMENTS: email reults to peckd@cityofrochester.gov	
	Quotation # MS 031108A Reference - Fire Academy	

Page 7 of 8

REQUESTED ANALYSIS

	DATE	TIME	COMPOSITE	GRAB	SAMPLE LOCATION/FIELD ID	MATRIX	NUMBER CONTAINERS	601/602	8015	625 +4-Methyl phenol	608 PCBs	pH						REMARKS	PARADIGM LAB SAMPLE NUMBER				
1	6/14/13			X	Effluent	Water	8	X	X	X	X	X						plus 1 extra liter	01				
2																							
3																							
4																							
5																							
6																							
7																							
8																							
9																							
10																							

****LAB USE ONLY****

SAMPLE CONDITION: Check box if acceptable or note deviation: CONTAINER TYPE: ☐ PRESERVATIONS: ☐ HOLDING TIME: ☐ TEMPERATURE: ☐ 15°C

Sampled By: Dennis Peck Date/Time: 6/14/13

Relinquished By: Dennis Peck Date/Time: 6/14/13 1515

Received By: Date/Time: 6/14/13 1515

Relinquished By: Date/Time:

Received By: Date/Time:

Received @ Lab By: Elizabeth A Hanick Date/Time: 6/14/13 1600

Total Cost:

P.I.F.

2 of 2

PARADIGM

Chain of Custody Supplement

Client: City of Roch **Completed by:** MWall

Lab Project ID: 132203 **Date:** 6/14/13

Sample Condition Requirements

Per NELAC/ELAP 210/241/242/243/244

Condition	NELAC compliance with the sample condition requirements upon receipt: Yes	No	N/A
Container Type	X		
Comments			
Transferred to method-compliant container			X
Headspace (<1 mL)	X		
Comments			
Preservation	X		
Comments			
Chlorine Absent (<0.10 ppm per test strip)	SVOA		
Comments	VOA's		
Holding Time	X		
Comments			
Temperature		X	
Comments	15°C		
Sufficient Sample Quantity	X		
Comments			

Attachment #3

Table 3-6
City of Rochester Division of Environmental Quality
Rochester Fire Academy
Monitoring Well Sampling Results 5/22/2013

	Parameter	MW6S	MW6I	MW7S	MW7I	MW7D	MW8S	MW8I	MW9D	MW9S	MW10S	MW10I	MW11S	MW11I	MW15S
Total Volatiles (601/602) (ug/L)	Vinyl Chloride	N/A	**6.03**	**306.00**	**328.00**	ND(2.0)	N/A	**220.00**	**33.50**	N/A	ND(2.0)	ND(2.0)	N/A	**245.00**	ND(2.0)
	Chloroethane	N/A	ND(2.0)	**85.60**	**117.00**	ND(2.0)	N/A	ND(4.0)	ND(2.0)	N/A	ND(2.0)	ND(2.0)	N/A	ND(4.0)	ND(2.0)
	1,1 - Dichloroethene	N/A	ND(2.0)	ND(20.0)	ND(20.0)	ND(2.0)	N/A	ND(4.0)	ND(2.0)	N/A	ND(2.0)	ND(2.0)	N/A	ND(4.0)	ND(2.0)
	1,1 - Dichloroethane	N/A	ND(2.0)	**507.00**	**607.00**	ND(2.0)	N/A	ND(4.0)	**6.40**	N/A	ND(2.0)	ND(2.0)	N/A	ND(4.0)	ND(2.0)
	1,2 - Dichloroethane	N/A	ND(2.0)	ND(20.0)	ND(20.0)	ND(2.0)	N/A	ND(4.0)	ND(2.0)	N/A	ND(2.0)	ND(2.0)	N/A	ND(4.0)	ND(2.0)
	Tetrachloroethene	N/A	ND(2.0)	ND(20.0)	ND(20.0)	ND(2.0)	N/A	ND(4.0)	ND(2.0)	N/A	ND(2.0)	ND(2.0)	N/A	ND(4.0)	ND(2.0)
	1,1,1 - Trichloroethane	N/A	ND(2.0)	**106.00**	**56.50**	ND(2.0)	N/A	ND(4.0)	ND(2.0)	N/A	ND(2.0)	ND(2.0)	N/A	ND(4.0)	ND(2.0)
	Trichloroethene	N/A	ND(2.0)	ND(20.0)	ND(20.0)	ND(2.0)	N/A	ND(4.0)	ND(2.0)	N/A	ND(2.0)	ND(2.0)	N/A	ND(4.0)	ND(2.0)
	MTBE	N/A	ND(2.0)	ND(20.0)	ND(20.0)	ND(2.0)	N/A	ND(4.0)	ND(2.0)	N/A	ND(2.0)	**4.72**	N/A	ND(4.0)	ND(2.0)
	Benzene	N/A	ND(0.7)	ND(7.0)	ND(7.0)	ND(0.7)	N/A	ND(1.4)	ND(0.7)	N/A	ND(0.7)	ND(0.7)	N/A	ND(1.4)	ND(2.0)
	Toluene	N/A	ND(2.0)	ND(20.0)	ND(20.0)	ND(2.0)	N/A	ND(4.0)	ND(2.0)	N/A	ND(2.0)	ND(2.0)	N/A	ND(4.0)	ND(2.0)
	Ethylbenzene	N/A	ND(2.0)	**42.80**	ND(20.0)	ND(2.0)	N/A	ND(4.0)	ND(2.0)	N/A	ND(2.0)	ND(2.0)	N/A	ND(4.0)	ND(2.0)

PARADIGM

Analytical Report For

City of Rochester

For Lab Project ID

131860

Referencing

RFA Semi-Annual GW Sampling, DEQ-98045

Prepared

Thursday, May 30, 2013

Any noncompliant QC parameters or other notes impacting data interpretation are flagged or documented on the final report or are noted below.

Certifies that this report has been approved by the Technical Director or Designee

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.

179 Lake Avenue • Rochester, NY 14608 • (585) 647-2530 • Fax (585) 647-3311 • ELAP ID# 10958

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 131860

Client: City of Rochester

Project Reference: RFA Semi-Annual GW Sampling, DEQ-98045

Sample Identifier: MW 6I
Lab Sample ID: 131860-01
Matrix: Groundwater

Date Sampled: 5/22/2013 1:15 PM
Date Received: 5/22/2013

Volatile Organics

Analyte	Result	Units	Qualifier	Date/Time Analyzed
1,1,1-Trichloroethane	< 2.00	ug/L		5/23/2013 10:08:00 PM
1,1,2,2-Tetrachloroethane	< 2.00	ug/L		5/23/2013 10:08:00 PM
1,1,2-Trichloroethane	< 2.00	ug/L		5/23/2013 10:08:00 PM
1,1-Dichloroethane	< 2.00	ug/L		5/23/2013 10:08:00 PM
1,1-Dichloroethene	< 2.00	ug/L		5/23/2013 10:08:00 PM
1,2-Dichlorobenzene	< 2.00	ug/L		5/23/2013 10:08:00 PM
1,2-Dichloroethane	< 2.00	ug/L		5/23/2013 10:08:00 PM
1,2-Dichloropropane	< 2.00	ug/L		5/23/2013 10:08:00 PM
1,3-Dichlorobenzene	< 2.00	ug/L		5/23/2013 10:08:00 PM
1,4-Dichlorobenzene	< 2.00	ug/L		5/23/2013 10:08:00 PM
2-Chloroethyl vinyl Ether	< 10.0	ug/L		5/23/2013 10:08:00 PM
Benzene	< 0.700	ug/L		5/23/2013 10:08:00 PM
Bromodichloromethane	< 2.00	ug/L		5/23/2013 10:08:00 PM
Bromoform	< 5.00	ug/L		5/23/2013 10:08:00 PM
Bromomethane	< 2.00	ug/L		5/23/2013 10:08:00 PM
Carbon Tetrachloride	< 2.00	ug/L		5/23/2013 10:08:00 PM
Chlorobenzene	< 2.00	ug/L		5/23/2013 10:08:00 PM
Chloroethane	< 2.00	ug/L		5/23/2013 10:08:00 PM
Chloroform	< 2.00	ug/L		5/23/2013 10:08:00 PM
Chloromethane	< 2.00	ug/L		5/23/2013 10:08:00 PM
cis-1,3-Dichloropropene	< 2.00	ug/L		5/23/2013 10:08:00 PM
Dibromochloromethane	< 2.00	ug/L		5/23/2013 10:08:00 PM
Ethylbenzene	< 2.00	ug/L		5/23/2013 10:08:00 PM
Methyl tert-butyl Ether	< 2.00	ug/L		5/23/2013 10:08:00 PM
Methylene chloride	< 5.00	ug/L		5/23/2013 10:08:00 PM
Tetrachloroethene	< 2.00	ug/L		5/23/2013 10:08:00 PM
Toluene	< 2.00	ug/L		5/23/2013 10:08:00 PM
trans-1,2-Dichloroethene	< 2.00	ug/L		5/23/2013 10:08:00 PM

PARADIGM

ENVIRONMENTAL SERVICES, INC

Lab Project ID: 131860

Client: City of Rochester

Project Reference: RFA Semi-Annual GW Sampling, DEQ-98045

Sample Identifier: MW 6I
Lab Sample ID: 131860-01
Matrix: Groundwater

Date Sampled: 5/22/2013 1:15 PM
Date Received: 5/22/2013

trans-1,3-Dichloropropene	< 2.00	ug/L	5/23/2013 10:08:00 PM
Trichloroethene	< 2.00	ug/L	5/23/2013 10:08:00 PM
Trichlorofluoromethane	< 2.00	ug/L	5/23/2013 10:08:00 PM
Vinyl chloride	**6.03**	ug/L	5/23/2013 10:08:00 PM

Method Reference(s): EPA 624 Modified
Data File: X05481.D

PARADIGM
ENVIRONMENTAL SERVICES, INC

Lab Project ID: 131860

Client: City of Rochester

Project Reference: RFA Semi-Annual GW Sampling, DEQ-98045

Sample Identifier: MW 7I
Lab Sample ID: 131860-02
Matrix: Groundwater

Date Sampled: 5/22/2013 1:23 PM
Date Received: 5/22/2013

Volatile Organics

Analyte	Result	Units	Qualifier	Date/Time Analyzed
1,1,1-Trichloroethane	**56.5**	ug/L		5/23/2013 10:31:00 PM
1,1,2,2-Tetrachloroethane	< 20.0	ug/L		5/23/2013 10:31:00 PM
1,1,2-Trichloroethane	< 20.0	ug/L		5/23/2013 10:31:00 PM
1,1-Dichloroethane	**607**	ug/L		5/23/2013 10:31:00 PM
1,1-Dichloroethene	< 20.0	ug/L		5/23/2013 10:31:00 PM
1,2-Dichlorobenzene	< 20.0	ug/L		5/23/2013 10:31:00 PM
1,2-Dichloroethane	< 20.0	ug/L		5/23/2013 10:31:00 PM
1,2-Dichloropropane	< 20.0	ug/L		5/23/2013 10:31:00 PM
1,3-Dichlorobenzene	< 20.0	ug/L		5/23/2013 10:31:00 PM
1,4-Dichlorobenzene	< 20.0	ug/L		5/23/2013 10:31:00 PM
2-Chloroethyl vinyl Ether	< 100	ug/L		5/23/2013 10:31:00 PM
Benzene	< 7.00	ug/L		5/23/2013 10:31:00 PM
Bromodichloromethane	< 20.0	ug/L		5/23/2013 10:31:00 PM
Bromoform	< 50.0	ug/L		5/23/2013 10:31:00 PM
Bromomethane	< 20.0	ug/L		5/23/2013 10:31:00 PM
Carbon Tetrachloride	< 20.0	ug/L		5/23/2013 10:31:00 PM
Chlorobenzene	< 20.0	ug/L		5/23/2013 10:31:00 PM
Chloroethane	**117**	ug/L		5/23/2013 10:31:00 PM
Chloroform	< 20.0	ug/L		5/23/2013 10:31:00 PM
Chloromethane	< 20.0	ug/L		5/23/2013 10:31:00 PM
cis-1,3-Dichloropropene	< 20.0	ug/L		5/23/2013 10:31:00 PM
Dibromochloromethane	< 20.0	ug/L		5/23/2013 10:31:00 PM
Ethylbenzene	< 20.0	ug/L		5/23/2013 10:31:00 PM
Methyl tert-butyl Ether	< 20.0	ug/L		5/23/2013 10:31:00 PM
Methylene chloride	< 50.0	ug/L		5/23/2013 10:31:00 PM
Tetrachloroethene	< 20.0	ug/L		5/23/2013 10:31:00 PM
Toluene	< 20.0	ug/L		5/23/2013 10:31:00 PM
trans-1,2-Dichloroethene	< 20.0	ug/L		5/23/2013 10:31:00 PM

Report Prepared Thursday, May 30, 2013

PARADIGM
ENVIRONMENTAL SERVICES, INC

Lab Project ID: 131860

Client: City of Rochester

Project Reference: RFA Semi-Annual GW Sampling, DEQ-98045

Sample Identifier: MW 7I
Lab Sample ID: 131860-02
Matrix: Groundwater

Date Sampled: 5/22/2013 1:23 PM
Date Received: 5/22/2013

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trans-1,3-Dichloropropene	< 20.0	ug/L	5/23/2013 10:31:00 PM
Trichloroethene	< 20.0	ug/L	5/23/2013 10:31:00 PM
Trichlorofluoromethane	< 20.0	ug/L	5/23/2013 10:31:00 PM
Vinyl chloride	**328**	ug/L	5/23/2013 10:31:00 PM

Method Reference(s): EPA 624 Modified
Data File: X05482.D

PARADIGM

PARADIGM
ENVIRONMENTAL SERVICES, INC

Lab Project ID: 131860

Client: City of Rochester

Project Reference: RFA Semi-Annual GW Sampling, DEQ-98045

Sample Identifier: MW 7D
Lab Sample ID: 131860-03
Matrix: Groundwater

Date Sampled: 5/22/2013 1:25 PM
Date Received: 5/22/2013

Volatile Organics

Analyte	Result	Units	Qualifier	Date/Time Analyzed
1,1,1-Trichloroethane	< 2.00	ug/L		5/23/2013 10:54:00 PM
1,1,2,2-Tetrachloroethane	< 2.00	ug/L		5/23/2013 10:54:00 PM
1,1,2-Trichloroethane	< 2.00	ug/L		5/23/2013 10:54:00 PM
1,1-Dichloroethane	< 2.00	ug/L		5/23/2013 10:54:00 PM
1,1-Dichloroethene	< 2.00	ug/L		5/23/2013 10:54:00 PM
1,2-Dichlorobenzene	< 2.00	ug/L		5/23/2013 10:54:00 PM
1,2-Dichloroethane	< 2.00	ug/L		5/23/2013 10:54:00 PM
1,2-Dichloropropane	< 2.00	ug/L		5/23/2013 10:54:00 PM
1,3-Dichlorobenzene	< 2.00	ug/L		5/23/2013 10:54:00 PM
1,4-Dichlorobenzene	< 2.00	ug/L		5/23/2013 10:54:00 PM
2-Chloroethyl vinyl Ether	< 10.0	ug/L		5/23/2013 10:54:00 PM
Benzene	< 0.700	ug/L		5/23/2013 10:54:00 PM
Bromodichloromethane	< 2.00	ug/L		5/23/2013 10:54:00 PM
Bromoform	< 5.00	ug/L		5/23/2013 10:54:00 PM
Bromomethane	< 2.00	ug/L		5/23/2013 10:54:00 PM
Carbon Tetrachloride	< 2.00	ug/L		5/23/2013 10:54:00 PM
Chlorobenzene	< 2.00	ug/L		5/23/2013 10:54:00 PM
Chloroethane	< 2.00	ug/L		5/23/2013 10:54:00 PM
Chloroform	< 2.00	ug/L		5/23/2013 10:54:00 PM
Chloromethane	< 2.00	ug/L		5/23/2013 10:54:00 PM
cis-1,3-Dichloropropene	< 2.00	ug/L		5/23/2013 10:54:00 PM
Dibromochloromethane	< 2.00	ug/L		5/23/2013 10:54:00 PM
Ethylbenzene	< 2.00	ug/L		5/23/2013 10:54:00 PM
Methyl tert-butyl Ether	< 2.00	ug/L		5/23/2013 10:54:00 PM
Methylene chloride	< 5.00	ug/L		5/23/2013 10:54:00 PM
Tetrachloroethene	< 2.00	ug/L		5/23/2013 10:54:00 PM
Toluene	< 2.00	ug/L		5/23/2013 10:54:00 PM
trans-1,2-Dichloroethene	< 2.00	ug/L		5/23/2013 10:54:00 PM

PARADIGM
ENVIRONMENTAL SERVICES, INC

Lab Project ID: 131860

Client: City of Rochester

Project Reference: RFA Semi-Annual GW Sampling, DEQ-98045

Sample Identifier: MW 7D
Lab Sample ID: 131860-03
Matrix: Groundwater

Date Sampled: 5/22/2013 1:25 PM
Date Received: 5/22/2013

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trans-1,3-Dichloropropene	< 2.00	ug/L	5/23/2013 10:54:00 PM
Trichloroethene	< 2.00	ug/L	5/23/2013 10:54:00 PM
Trichlorofluoromethane	< 2.00	ug/L	5/23/2013 10:54:00 PM
Vinyl chloride	< 2.00	ug/L	5/23/2013 10:54:00 PM

Method Reference(s): EPA 624 Modified
Data File: X05483.D

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 131860

Client: City of Rochester

Project Reference: RFA Semi-Annual GW Sampling, DEQ-98045

Sample Identifier: MW 7S
Lab Sample ID: 131860-04
Matrix: Groundwater

Date Sampled: 5/22/2013 1:20 PM
Date Received: 5/22/2013

Volatile Organics

Analyte	Result	Units	Qualifier	Date/Time Analyzed
1,1,1-Trichloroethane	**106**	ug/L		5/23/2013 11:17:00 PM
1,1,2,2-Tetrachloroethane	< 20.0	ug/L		5/23/2013 11:17:00 PM
1,1,2-Trichloroethane	< 20.0	ug/L		5/23/2013 11:17:00 PM
1,1-Dichloroethane	**507**	ug/L		5/23/2013 11:17:00 PM
1,1-Dichloroethene	< 20.0	ug/L		5/23/2013 11:17:00 PM
1,2-Dichlorobenzene	< 20.0	ug/L		5/23/2013 11:17:00 PM
1,2-Dichloroethane	< 20.0	ug/L		5/23/2013 11:17:00 PM
1,2-Dichloropropane	< 20.0	ug/L		5/23/2013 11:17:00 PM
1,3-Dichlorobenzene	< 20.0	ug/L		5/23/2013 11:17:00 PM
1,4-Dichlorobenzene	< 20.0	ug/L		5/23/2013 11:17:00 PM
2-Chloroethyl vinyl Ether	< 100	ug/L		5/23/2013 11:17:00 PM
Benzene	< 7.00	ug/L		5/23/2013 11:17:00 PM
Bromodichloromethane	< 20.0	ug/L		5/23/2013 11:17:00 PM
Bromoform	< 50.0	ug/L		5/23/2013 11:17:00 PM
Bromomethane	< 20.0	ug/L		5/23/2013 11:17:00 PM
Carbon Tetrachloride	< 20.0	ug/L		5/23/2013 11:17:00 PM
Chlorobenzene	< 20.0	ug/L		5/23/2013 11:17:00 PM
Chloroethane	**85.6**	ug/L		5/23/2013 11:17:00 PM
Chloroform	< 20.0	ug/L		5/23/2013 11:17:00 PM
Chloromethane	< 20.0	ug/L		5/23/2013 11:17:00 PM
cis-1,3-Dichloropropene	< 20.0	ug/L		5/23/2013 11:17:00 PM
Dibromochloromethane	< 20.0	ug/L		5/23/2013 11:17:00 PM
Ethylbenzene	**42.8**	ug/L		5/23/2013 11:17:00 PM
Methyl tert-butyl Ether	< 20.0	ug/L		5/23/2013 11:17:00 PM
Methylene chloride	< 50.0	ug/L		5/23/2013 11:17:00 PM
Tetrachloroethene	< 20.0	ug/L		5/23/2013 11:17:00 PM
Toluene	< 20.0	ug/L		5/23/2013 11:17:00 PM
trans-1,2-Dichloroethene	< 20.0	ug/L		5/23/2013 11:17:00 PM

PARADIGM
ENVIRONMENTAL SERVICES, INC

Lab Project ID: 131860

Client: City of Rochester

Project Reference: RFA Semi-Annual GW Sampling, DEQ-98045

Sample Identifier: MW 7S

Lab Sample ID: 131860-04

Matrix: Groundwater

Date Sampled: 5/22/2013 1:20 PM

Date Received: 5/22/2013

trans-1,3-Dichloropropene	< 20.0	ug/L	5/23/2013 11:17:00 PM
Trichloroethene	< 20.0	ug/L	5/23/2013 11:17:00 PM
Trichlorofluoromethane	< 20.0	ug/L	5/23/2013 11:17:00 PM
Vinyl chloride	**306**	ug/L	5/23/2013 11:17:00 PM

Method Reference(s): EPA 624 Modified

Data File: X05484.D

Report Prepared Thursday, May 30, 2013

PARADIGM

ENVIRONMENTAL SERVICES, INC

Lab Project ID: 131860

Client: City of Rochester

Project Reference: RFA Semi-Annual GW Sampling, DEQ-98045

Sample Identifier: MW 8I
Lab Sample ID: 131860-05
Matrix: Groundwater

Date Sampled: 5/22/2013 12:50 PM
Date Received: 5/22/2013

Volatile Organics

Analyte	Result	Units	Qualifier	Date/Time Analyzed
1,1,1-Trichloroethane	< 4.00	ug/L		5/25/2013 3:16:00 AM
1,1,2,2-Tetrachloroethane	< 4.00	ug/L		5/25/2013 3:16:00 AM
1,1,2-Trichloroethane	< 4.00	ug/L		5/25/2013 3:16:00 AM
1,1-Dichloroethane	< 4.00	ug/L		5/25/2013 3:16:00 AM
1,1-Dichloroethene	< 4.00	ug/L		5/25/2013 3:16:00 AM
1,2-Dichlorobenzene	< 4.00	ug/L		5/25/2013 3:16:00 AM
1,2-Dichloroethane	< 4.00	ug/L		5/25/2013 3:16:00 AM
1,2-Dichloropropane	< 4.00	ug/L		5/25/2013 3:16:00 AM
1,3-Dichlorobenzene	< 4.00	ug/L		5/25/2013 3:16:00 AM
1,4-Dichlorobenzene	< 4.00	ug/L		5/25/2013 3:16:00 AM
2-Chloroethyl vinyl Ether	< 20.0	ug/L		5/25/2013 3:16:00 AM
Benzene	< 1.40	ug/L		5/25/2013 3:16:00 AM
Bromodichloromethane	< 4.00	ug/L		5/25/2013 3:16:00 AM
Bromoform	< 10.0	ug/L		5/25/2013 3:16:00 AM
Bromomethane	< 4.00	ug/L		5/25/2013 3:16:00 AM
Carbon Tetrachloride	< 4.00	ug/L		5/25/2013 3:16:00 AM
Chlorobenzene	< 4.00	ug/L		5/25/2013 3:16:00 AM
Chloroethane	< 4.00	ug/L		5/25/2013 3:16:00 AM
Chloroform	< 4.00	ug/L		5/25/2013 3:16:00 AM
Chloromethane	< 4.00	ug/L		5/25/2013 3:16:00 AM
cis-1,3-Dichloropropene	< 4.00	ug/L		5/25/2013 3:16:00 AM
Dibromochloromethane	< 4.00	ug/L		5/25/2013 3:16:00 AM
Ethylbenzene	< 4.00	ug/L		5/25/2013 3:16:00 AM
Methyl tert-butyl Ether	< 4.00	ug/L		5/25/2013 3:16:00 AM
Methylene chloride	< 10.0	ug/L		5/25/2013 3:16:00 AM
Tetrachloroethene	< 4.00	ug/L		5/25/2013 3:16:00 AM
Toluene	< 4.00	ug/L		5/25/2013 3:16:00 AM
trans-1,2-Dichloroethene	< 4.00	ug/L		5/25/2013 3:16:00 AM

PARADIGM
ENVIRONMENTAL SERVICES, INC

Lab Project ID: 131860

Client: City of Rochester

Project Reference: RFA Semi-Annual GW Sampling, DEQ-98045

Sample Identifier: MW 8I
Lab Sample ID: 131860-05
Matrix: Groundwater

Date Sampled: 5/22/2013 12:50 PM
Date Received: 5/22/2013

trans-1,3-Dichloropropene	< 4.00	ug/L	5/25/2013 3:16:00 AM
Trichloroethene	< 4.00	ug/L	5/25/2013 3:16:00 AM
Trichlorofluoromethane	< 4.00	ug/L	5/25/2013 3:16:00 AM
Vinyl chloride	**220**	ug/L	5/25/2013 3:16:00 AM

Method Reference(s): EPA 624 Modified
Data File: X05525.D

PARADIGM
ENVIRONMENTAL SERVICES, INC

Lab Project ID: 131860

Client: City of Rochester

Project Reference: RFA Semi-Annual GW Sampling, DEQ-98045

Sample Identifier: MW 9D
Lab Sample ID: 131860-06
Matrix: Groundwater

Date Sampled: 5/22/2013 1:30 PM
Date Received: 5/22/2013

Volatile Organics

Analyte	Result	Units	Qualifier	Date/Time Analyzed
1,1,1-Trichloroethane	< 2.00	ug/L		5/25/2013 3:39:00 AM
1,1,2,2-Tetrachloroethane	< 2.00	ug/L		5/25/2013 3:39:00 AM
1,1,2-Trichloroethane	< 2.00	ug/L		5/25/2013 3:39:00 AM
1,1-Dichloroethane	**6.40**	ug/L		5/25/2013 3:39:00 AM
1,1-Dichloroethene	< 2.00	ug/L		5/25/2013 3:39:00 AM
1,2-Dichlorobenzene	< 2.00	ug/L		5/25/2013 3:39:00 AM
1,2-Dichloroethane	< 2.00	ug/L		5/25/2013 3:39:00 AM
1,2-Dichloropropane	< 2.00	ug/L		5/25/2013 3:39:00 AM
1,3-Dichlorobenzene	< 2.00	ug/L		5/25/2013 3:39:00 AM
1,4-Dichlorobenzene	< 2.00	ug/L		5/25/2013 3:39:00 AM
2-Chloroethyl vinyl Ether	< 10.0	ug/L		5/25/2013 3:39:00 AM
Benzene	< 0.700	ug/L		5/25/2013 3:39:00 AM
Bromodichloromethane	< 2.00	ug/L		5/25/2013 3:39:00 AM
Bromoform	< 5.00	ug/L		5/25/2013 3:39:00 AM
Bromomethane	< 2.00	ug/L		5/25/2013 3:39:00 AM
Carbon Tetrachloride	< 2.00	ug/L		5/25/2013 3:39:00 AM
Chlorobenzene	< 2.00	ug/L		5/25/2013 3:39:00 AM
Chloroethane	< 2.00	ug/L		5/25/2013 3:39:00 AM
Chloroform	< 2.00	ug/L		5/25/2013 3:39:00 AM
Chloromethane	< 2.00	ug/L		5/25/2013 3:39:00 AM
cis-1,3-Dichloropropene	< 2.00	ug/L		5/25/2013 3:39:00 AM
Dibromochloromethane	< 2.00	ug/L		5/25/2013 3:39:00 AM
Ethylbenzene	< 2.00	ug/L		5/25/2013 3:39:00 AM
Methyl tert-butyl Ether	< 2.00	ug/L		5/25/2013 3:39:00 AM
Methylene chloride	< 5.00	ug/L		5/25/2013 3:39:00 AM
Tetrachloroethene	< 2.00	ug/L		5/25/2013 3:39:00 AM
Toluene	< 2.00	ug/L		5/25/2013 3:39:00 AM
trans-1,2-Dichloroethene	< 2.00	ug/L		5/25/2013 3:39:00 AM

PARADIGM

ENVIRONMENTAL SERVICES, INC

Lab Project ID: 131860

Client: City of Rochester

Project Reference: RFA Semi-Annual GW Sampling, DEQ-98045

Sample Identifier: MW 9D
Lab Sample ID: 131860-06
Matrix: Groundwater

Date Sampled: 5/22/2013 1:30 PM
Date Received: 5/22/2013

trans-1,3-Dichloropropene	< 2.00	ug/L	5/25/2013 3:39:00 AM
Trichloroethene	< 2.00	ug/L	5/25/2013 3:39:00 AM
Trichlorofluoromethane	< 2.00	ug/L	5/25/2013 3:39:00 AM
Vinyl chloride	**35.5**	ug/L	5/25/2013 3:39:00 AM

Method Reference(s): EPA 624 Modified
Data File: X05526.D

PARADIGM
ENVIRONMENTAL SERVICES, INC

Lab Project ID: 131860

Client: City of Rochester

Project Reference: RFA Semi-Annual GW Sampling, DEQ-98045

Sample Identifier: MW 10I
Lab Sample ID: 131860-07
Matrix: Groundwater

Date Sampled: 5/22/2013 1:00 PM
Date Received: 5/22/2013

Volatile Organics

Analyte	Result	Units	Qualifier	Date/Time Analyzed
1,1,1-Trichloroethane	< 2.00	ug/L		5/25/2013 4:02:00 AM
1,1,2,2-Tetrachloroethane	< 2.00	ug/L		5/25/2013 4:02:00 AM
1,1,2-Trichloroethane	< 2.00	ug/L		5/25/2013 4:02:00 AM
1,1-Dichloroethane	< 2.00	ug/L		5/25/2013 4:02:00 AM
1,1-Dichloroethene	< 2.00	ug/L		5/25/2013 4:02:00 AM
1,2-Dichlorobenzene	< 2.00	ug/L		5/25/2013 4:02:00 AM
1,2-Dichloroethane	< 2.00	ug/L		5/25/2013 4:02:00 AM
1,2-Dichloropropane	< 2.00	ug/L		5/25/2013 4:02:00 AM
1,3-Dichlorobenzene	< 2.00	ug/L		5/25/2013 4:02:00 AM
1,4-Dichlorobenzene	< 2.00	ug/L		5/25/2013 4:02:00 AM
2-Chloroethyl vinyl Ether	< 10.0	ug/L		5/25/2013 4:02:00 AM
Benzene	< 0.700	ug/L		5/25/2013 4:02:00 AM
Bromodichloromethane	< 2.00	ug/L		5/25/2013 4:02:00 AM
Bromoform	< 5.00	ug/L		5/25/2013 4:02:00 AM
Bromomethane	< 2.00	ug/L		5/25/2013 4:02:00 AM
Carbon Tetrachloride	< 2.00	ug/L		5/25/2013 4:02:00 AM
Chlorobenzene	< 2.00	ug/L		5/25/2013 4:02:00 AM
Chloroethane	< 2.00	ug/L		5/25/2013 4:02:00 AM
Chloroform	< 2.00	ug/L		5/25/2013 4:02:00 AM
Chloromethane	< 2.00	ug/L		5/25/2013 4:02:00 AM
cis-1,3-Dichloropropene	< 2.00	ug/L		5/25/2013 4:02:00 AM
Dibromochloromethane	< 2.00	ug/L		5/25/2013 4:02:00 AM
Ethylbenzene	< 2.00	ug/L		5/25/2013 4:02:00 AM
Methyl tert-butyl Ether	**4.72**	ug/L		5/25/2013 4:02:00 AM
Methylene chloride	< 5.00	ug/L		5/25/2013 4:02:00 AM
Tetrachloroethene	< 2.00	ug/L		5/25/2013 4:02:00 AM
Toluene	< 2.00	ug/L		5/25/2013 4:02:00 AM
trans-1,2-Dichloroethene	< 2.00	ug/L		5/25/2013 4:02:00 AM

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 131860

Client: City of Rochester

Project Reference: RFA Semi-Annual GW Sampling, DEQ-98045

Sample Identifier: MW 10I
Lab Sample ID: 131860-07
Matrix: Groundwater

Date Sampled: 5/22/2013 1:00 PM
Date Received: 5/22/2013

trans-1,3-Dichloropropene	< 2.00	ug/L	5/25/2013 4:02:00 AM
Trichloroethene	< 2.00	ug/L	5/25/2013 4:02:00 AM
Trichlorofluoromethane	< 2.00	ug/L	5/25/2013 4:02:00 AM
Vinyl chloride	< 2.00	ug/L	5/25/2013 4:02:00 AM

Method Reference(s): EPA 624 Modified
Data File: X05527.D

PARADIGM
ENVIRONMENTAL SERVICES, INC

Lab Project ID: 131860

Client: City of Rochester

Project Reference: RFA Semi-Annual GW Sampling, DEQ-98045

Sample Identifier: MW 10S
Lab Sample ID: 131860-08
Matrix: Groundwater

Date Sampled: 5/22/2013 1:02 PM
Date Received: 5/22/2013

Volatile Organics

Analyte	Result	Units	Qualifier	Date/Time Analyzed
1,1,1-Trichloroethane	< 2.00	ug/L		5/25/2013 4:25:00 AM
1,1,2,2-Tetrachloroethane	< 2.00	ug/L		5/25/2013 4:25:00 AM
1,1,2-Trichloroethane	< 2.00	ug/L		5/25/2013 4:25:00 AM
1,1-Dichloroethane	< 2.00	ug/L		5/25/2013 4:25:00 AM
1,1-Dichloroethene	< 2.00	ug/L		5/25/2013 4:25:00 AM
1,2-Dichlorobenzene	< 2.00	ug/L		5/25/2013 4:25:00 AM
1,2-Dichloroethane	< 2.00	ug/L		5/25/2013 4:25:00 AM
1,2-Dichloropropane	< 2.00	ug/L		5/25/2013 4:25:00 AM
1,3-Dichlorobenzene	< 2.00	ug/L		5/25/2013 4:25:00 AM
1,4-Dichlorobenzene	< 2.00	ug/L		5/25/2013 4:25:00 AM
2-Chloroethyl vinyl Ether	< 10.0	ug/L		5/25/2013 4:25:00 AM
Benzene	< 0.700	ug/L		5/25/2013 4:25:00 AM
Bromodichloromethane	< 2.00	ug/L		5/25/2013 4:25:00 AM
Bromoform	< 5.00	ug/L		5/25/2013 4:25:00 AM
Bromomethane	< 2.00	ug/L		5/25/2013 4:25:00 AM
Carbon Tetrachloride	< 2.00	ug/L		5/25/2013 4:25:00 AM
Chlorobenzene	< 2.00	ug/L		5/25/2013 4:25:00 AM
Chloroethane	< 2.00	ug/L		5/25/2013 4:25:00 AM
Chloroform	< 2.00	ug/L		5/25/2013 4:25:00 AM
Chloromethane	< 2.00	ug/L		5/25/2013 4:25:00 AM
cis-1,3-Dichloropropene	< 2.00	ug/L		5/25/2013 4:25:00 AM
Dibromochloromethane	< 2.00	ug/L		5/25/2013 4:25:00 AM
Ethylbenzene	< 2.00	ug/L		5/25/2013 4:25:00 AM
Methyl tert-butyl Ether	< 2.00	ug/L		5/25/2013 4:25:00 AM
Methylene chloride	< 5.00	ug/L		5/25/2013 4:25:00 AM
Tetrachloroethene	< 2.00	ug/L		5/25/2013 4:25:00 AM
Toluene	< 2.00	ug/L		5/25/2013 4:25:00 AM
trans-1,2-Dichloroethene	< 2.00	ug/L		5/25/2013 4:25:00 AM

PARADIGM
ENVIRONMENTAL SERVICES, INC

Lab Project ID: 131860

Client: City of Rochester

Project Reference: RFA Semi-Annual GW Sampling, DEQ-98045

Sample Identifier: MW 10S
Lab Sample ID: 131860-08
Matrix: Groundwater

Date Sampled: 5/22/2013 1:02 PM
Date Received: 5/22/2013

trans-1,3-Dichloropropene	< 2.00	ug/L	5/25/2013 4:25:00 AM
Trichloroethene	< 2.00	ug/L	5/25/2013 4:25:00 AM
Trichlorofluoromethane	< 2.00	ug/L	5/25/2013 4:25:00 AM
Vinyl chloride	< 2.00	ug/L	5/25/2013 4:25:00 AM

Method Reference(s): EPA 624 Modified
Data File: X05528.D

PARADIGM
ENVIRONMENTAL SERVICES, INC

Lab Project ID: 131860

Client: City of Rochester

Project Reference: RFA Semi-Annual GW Sampling, DEQ-98045

Sample Identifier: MW 11I
Lab Sample ID: 131860-09
Matrix: Groundwater

Date Sampled: 5/22/2013 12:53 PM
Date Received: 5/22/2013

Volatile Organics

Analyte	Result	Units	Qualifier	Date/Time Analyzed
1,1,1-Trichloroethane	< 4.00	ug/L		5/28/2013 4:20:00 PM
1,1,2,2-Tetrachloroethane	< 4.00	ug/L		5/28/2013 4:20:00 PM
1,1,2-Trichloroethane	< 4.00	ug/L		5/28/2013 4:20:00 PM
1,1-Dichloroethane	< 4.00	ug/L		5/28/2013 4:20:00 PM
1,1-Dichloroethene	< 4.00	ug/L		5/28/2013 4:20:00 PM
1,2-Dichlorobenzene	< 4.00	ug/L		5/28/2013 4:20:00 PM
1,2-Dichloroethane	< 4.00	ug/L		5/28/2013 4:20:00 PM
1,2-Dichloropropane	< 4.00	ug/L		5/28/2013 4:20:00 PM
1,3-Dichlorobenzene	< 4.00	ug/L		5/28/2013 4:20:00 PM
1,4-Dichlorobenzene	< 4.00	ug/L		5/28/2013 4:20:00 PM
2-Chloroethyl vinyl Ether	< 20.0	ug/L		5/28/2013 4:20:00 PM
Benzene	< 1.40	ug/L		5/28/2013 4:20:00 PM
Bromodichloromethane	< 4.00	ug/L		5/28/2013 4:20:00 PM
Bromoform	< 10.0	ug/L		5/28/2013 4:20:00 PM
Bromomethane	< 4.00	ug/L		5/28/2013 4:20:00 PM
Carbon Tetrachloride	< 4.00	ug/L		5/28/2013 4:20:00 PM
Chlorobenzene	< 4.00	ug/L		5/28/2013 4:20:00 PM
Chloroethane	< 4.00	ug/L		5/28/2013 4:20:00 PM
Chloroform	< 4.00	ug/L		5/28/2013 4:20:00 PM
Chloromethane	< 4.00	ug/L		5/28/2013 4:20:00 PM
cis-1,3-Dichloropropene	< 4.00	ug/L		5/28/2013 4:20:00 PM
Dibromochloromethane	< 4.00	ug/L		5/28/2013 4:20:00 PM
Ethylbenzene	< 4.00	ug/L		5/28/2013 4:20:00 PM
Methyl tert-butyl Ether	< 4.00	ug/L		5/28/2013 4:20:00 PM
Methylene chloride	< 10.0	ug/L		5/28/2013 4:20:00 PM
Tetrachloroethene	< 4.00	ug/L		5/28/2013 4:20:00 PM
Toluene	< 4.00	ug/L		5/28/2013 4:20:00 PM
trans-1,2-Dichloroethene	< 4.00	ug/L		5/28/2013 4:20:00 PM

PARADIGM
ENVIRONMENTAL SERVICES, INC

Lab Project ID: 131860

Client: City of Rochester

Project Reference: RFA Semi-Annual GW Sampling, DEQ-98045

Sample Identifier: MW 11I
Lab Sample ID: 131860-09
Matrix: Groundwater

Date Sampled: 5/22/2013 12:53 PM
Date Received: 5/22/2013

trans-1,3-Dichloropropene	< 4.00	ug/L	5/28/2013 4:20:00 PM
Trichloroethene	< 4.00	ug/L	5/28/2013 4:20:00 PM
Trichlorofluoromethane	< 4.00	ug/L	5/28/2013 4:20:00 PM
Vinyl chloride	**245**	ug/L	5/28/2013 4:20:00 PM

Surrogate outliers indicate probable matrix interference

Method Reference(s): EPA 624 Modified
Data File: X05544.D

PARADIGM
ENVIRONMENTAL SERVICES, INC

Lab Project ID: 131860

Client: City of Rochester

Project Reference: RFA Semi-Annual GW Sampling, DEQ-98045

Sample Identifier: MW 15S
Lab Sample ID: 131860-10
Matrix: Groundwater

Date Sampled: 5/22/2013 12:45 PM
Date Received: 5/22/2013

Volatile Organics

Analyte	Result	Units	Qualifier	Date/Time Analyzed
1,1,1-Trichloroethane	< 2.00	ug/L		5/25/2013 5:11:00 AM
1,1,2,2-Tetrachloroethane	< 2.00	ug/L		5/25/2013 5:11:00 AM
1,1,2-Trichloroethane	< 2.00	ug/L		5/25/2013 5:11:00 AM
1,1-Dichloroethane	< 2.00	ug/L		5/25/2013 5:11:00 AM
1,1-Dichloroethene	< 2.00	ug/L		5/25/2013 5:11:00 AM
1,2-Dichlorobenzene	< 2.00	ug/L		5/25/2013 5:11:00 AM
1,2-Dichloroethane	< 2.00	ug/L		5/25/2013 5:11:00 AM
1,2-Dichloropropane	< 2.00	ug/L		5/25/2013 5:11:00 AM
1,3-Dichlorobenzene	< 2.00	ug/L		5/25/2013 5:11:00 AM
1,4-Dichlorobenzene	< 2.00	ug/L		5/25/2013 5:11:00 AM
2-Chloroethyl vinyl Ether	< 10.0	ug/L		5/25/2013 5:11:00 AM
Benzene	< 0.700	ug/L		5/25/2013 5:11:00 AM
Bromodichloromethane	< 2.00	ug/L		5/25/2013 5:11:00 AM
Bromoform	< 5.00	ug/L		5/25/2013 5:11:00 AM
Bromomethane	< 2.00	ug/L		5/25/2013 5:11:00 AM
Carbon Tetrachloride	< 2.00	ug/L		5/25/2013 5:11:00 AM
Chlorobenzene	< 2.00	ug/L		5/25/2013 5:11:00 AM
Chloroethane	< 2.00	ug/L		5/25/2013 5:11:00 AM
Chloroform	< 2.00	ug/L		5/25/2013 5:11:00 AM
Chloromethane	< 2.00	ug/L		5/25/2013 5:11:00 AM
cis-1,3-Dichloropropene	< 2.00	ug/L		5/25/2013 5:11:00 AM
Dibromochloromethane	< 2.00	ug/L		5/25/2013 5:11:00 AM
Ethylbenzene	< 2.00	ug/L		5/25/2013 5:11:00 AM
Methyl tert-butyl Ether	< 2.00	ug/L		5/25/2013 5:11:00 AM
Methylene chloride	< 5.00	ug/L		5/25/2013 5:11:00 AM
Tetrachloroethene	< 2.00	ug/L		5/25/2013 5:11:00 AM
Toluene	< 2.00	ug/L		5/25/2013 5:11:00 AM
trans-1,2-Dichloroethene	< 2.00	ug/L		5/25/2013 5:11:00 AM

PARADIGM
ENVIRONMENTAL SERVICES, INC

Lab Project ID: 131860

Client: City of Rochester

Project Reference: RFA Semi-Annual GW Sampling, DEQ-98045

Sample Identifier: MW 15S
Lab Sample ID: 131860-10
Matrix: Groundwater

Date Sampled: 5/22/2013 12:45 PM
Date Received: 5/22/2013

trans-1,3-Dichloropropene	< 2.00	ug/L	5/25/2013 5:11:00 AM
Trichloroethene	< 2.00	ug/L	5/25/2013 5:11:00 AM
Trichlorofluoromethane	< 2.00	ug/L	5/25/2013 5:11:00 AM
Vinyl chloride	< 2.00	ug/L	5/25/2013 5:11:00 AM

Method Reference(s): EPA 624 Modified
Data File: X05530.D

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Analytical Report Appendix

The reported results relate only to the samples as they have been received by the laboratory.

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All soil/sludge samples have been reported on a dry weight basis, unless qualified "reported as received". Other solids are reported as received.

The Chain of Custody provides additional information, including compliance with sample condition requirements upon receipt. Sample condition requirements are defined under the 2003 NELAC Standard, sections 5.5.8.3.1 and 5.5.8.3.2.

NYSDOH ELAP does not certify for all parameters. Paradigm Environmental Services or the indicated subcontracted laboratory does hold certification for all analytes where certification is offered by ELAP unless otherwise specified. Aliquots separated for certain tests, such as TCLP, are indicated on the Chain of Custody and final reports with an "A" suffix.

Data qualifiers are used, when necessary, to provide additional information about the data. This information may be communicated as a flag or as text at the bottom of the report. Please refer to the following list of analyte-specific, frequently used data flags and their meaning:

"<" = Analyzed for but not detected at or above the quantitation limit.
"E" = Result has been estimated, calibration limit exceeded.
"Z" = See case narrative.
"D" = Sample, Laboratory Control Sample, or Matrix Spike Duplicate results above Relative Percent Difference limit.
"M" = Matrix spike recoveries outside QC limits. Matrix bias indicated.
"B" = Method blank contained trace levels of analyte. Refer to included method blank report.
"V" = Sample concentration is >10 times the spike. No meaningful Spike Recovery can be calculated.
"J" = Result estimated between the quantitation limit and half the quantitation limit.
"L" = Laboratory Control Sample recovery outside accepted QC limits.
"NC" = Non Calculable due to Non Detect Results.
"" = Quality Control Outlier*

PARADIGM ENVIRONMENTAL SERVICES, INC.

179 Lake Avenue
Rochester, NY 14608
(585) 647-2530 * (800) 724-1997

CHAIN OF CUSTODY

REPORT TO:	INVOICE TO:	
COMPANY: CITY OF ROCHESTER	COMPANY:	LAB PROJECT #: 131860 / CLIENT PROJECT #:
ADDRESS: 30 CHURCH STREET, ROOM 300B	ADDRESS:	
CITY: ROCHESTER STATE: NY ZIP: 14614	CITY: STATE: ZIP:	TURNAROUND TIME: (WORKING DAYS)
PHONE: 585-428-6884 FAX: 585-428-6010	PHONE: FAX:	STD / OTHER
ATTN: DENNIS PECK	ATTN:	1 [ ] 2 [ ] 3 [ ] 5 [X] [ ]
COMMENTS: email results to peckd@cityofrochester.gov		

PROJECT NAME/SITE NAME: RFA semi-annual GW sampli DEQ-98045

REQUESTED ANALYSIS

	DATE	TIME	COMPOSITE	GRAB	SAMPLE LOCATION/FIELD ID	MATRIX	NUMBER CONTAINERS	601/602 + MTBE	REMARKS	PARADIGM LAB SAMPLE NUMBER
1	5/22/13	1315		X	MW 6I	Water	2	X		01
2		1323		X	MW 7I	Water	2	X		02
3		1325		X	MW 7D	Water	2	X		03
4		1320		X	MW 7S	Water	2	X		04
5		1250		X	MW 8I	Water	2	X		05
6		1330		X	MW 9D	Water	2	X		06
7		1300		X	MW 10I	Water	2	X		07
8		1302		X	MW 10S	Water	2	X		08
9		1253		X	MW 11I	Water	2	X		09
10		1245		X	MW 15S	Water	2	X		10

****LAB USE ONLY****

SAMPLE CONDITION: Check box if acceptable or note deviation: CONTAINER TYPE: [ ] PRESERVATIONS: [ ] HOLDING TIME: [ ] TEMPERATURE: [ ] 11°C iced

Sampled By: Dennis Peck Date/Time: 5/22/13	Relinquished By: Date/Time:	Total Cost:	
Relinquished By: Dennis Peck Date/Time: 5/22/13 1413	Received By: Date/Time:		
Received By: Date/Time: 5/22/13 1413	Received @ Lab By: Elizabeth A Yonce Date/Time: 5/22/13 1534	P.I.F.	

PARADIGM

Chain of Custody Supplement

Client: City of Rochester **Completed by:** EAH

Lab Project ID: 131860 **Date:** 5/22

Sample Condition Requirements

Per NELAC/ELAP 210/241/242/243/244

Condition	NELAC compliance with the sample condition requirements upon receipt: Yes	No	N/A
Container Type	X		
Comments			
Transferred to method-compliant container			X
Headspace (<1 mL)	X		
Comments			
Preservation	X		
Comments			
Chlorine Absent (<0.10 ppm per test strip)			
Comments	Cl: pos		
Holding Time	X		
Comments			
Temperature	X		
Comments	11°C iced - pres. began in field		
Sufficient Sample Quantity	X		
Comments			

Attachment #4

FEE PROPOSAL AND CHANGE IN SCOPE OF SERVICES REQUEST FORM

To be completed by consultant for Phase II, Industrial and Hazardous Waste, System Operation and Maintenance, and Laboratory services.

ATTACH A DESCRIPTION OF PROJECT UNDERSTANDING, BACKGROUND, OBJECTIVES, AND SCOPE OF WORK

Consultant Name: **Day Environmental, Inc.**

Date of Proposal: **July 3, 2013**

Agreement No.: **123243** **DEQ Project #:** _____

Site Location: **Rochester Fire Academy** **Acreage:** **Approximately 18 Acres**

Scope of Services

In response to a City of Rochester (City) Request for Professional Services and Proposal dated July 1, 2013, Day Environmental, Inc. (DAY) is submitting this proposal to the City for various professional services at the Rochester Fire Academy Site located at 1190 Scottsville Road, Rochester, New York (Site). The services to be provided are presented in the tasks outlined below.

Task 1.0 Geographical Information System (GIS)

The purpose of this task is to develop GIS files for use in the City's GIS database, for evaluation of investigation findings, and for possible future modeling applications, such as development of potentiometric groundwater contour maps, identification of areas of contaminated media, and development of contaminated media volumes with respect to standards, criteria, and guidance values that apply to this specific Site. The scope of services proposed by DAY is outlined below.

1. Prepare for and attend up to three meetings with representatives of the City. Assumes up to two meetings to obtain data for input into GIS, and one meeting to present the electronic GIS deliverables.
2. Although not anticipated, this task includes budget to use GPS in the field for up to two days to collect additional location information as deemed necessary by the City.
3. Create a geo-database in GIS using the following data and information provided by the City:
    a. Site boundaries, features, aerial photographs, and environmental test location files. DAY will take existing GIS data provided by the City and organize these items into a geo-database. The geo-database will centralize GIS data and imagery.
    b. Historic drawings and aerial imagery from previous projects conducted on the Site. This proposal assumes the City will provide the drawings in electronic format (e.g., PDF, JPEG). Each drawing pertinent to the Site will be geo-referenced to the GIS Site plan. Overlaying each drawing with the existing Site features will allow for a better understanding of where previous structures existed on the Site. This information can be used to plan future test locations and gain understanding of potential sources of contamination that exist at the Site.
    c. Upon completion of the geo-referencing; the features of each drawing will be converted into GIS shapefiles. Such features would include previous sample locations, structures, areas of concern, contamination plumes, etc.

Task 2.0 Groundwater Treatment Plant Upgrades

The purpose of this task is to upgrade the existing groundwater treatment system to improve system operations and reliability, and reduce operational labor requirements. The existing system has been experiencing increasingly frequent and/or prolonged service outages, and a recently completed engineering evaluation upon the system identified various deficiencies in equipment, operations and controls.

The following scope of work is proposed by DAY to address the identified deficiencies and minimize the potential for tank overflows, system outages, and/or other remedial program/regulatory agency program issues:

1. Expand the PLC control system to enable complete, centralized control of the water treatment system operations. This will include:
    a. Rewiring of four pump control panels;
    b. Installation of control wiring and terminations to connect four pump control panels and facility flow and level instrumentation to the existing PLC cabinet;
    c. Installation of redundant level controls to provide a safeguard against tank overflows in the event of primary level control failure;
    d. PLC upgrade (I/O cards) as needed to accommodate the new inputs and outputs identified above;
    e. PLC programming to provide centralized control;
    f. Installation of new HMI interface panel to enable the on-site system operator to view systems status (tank levels, pump operations and run time, flow rates, system alarms, etc.);
    g. Installation of internet access and HMI panel tie-in to enable remote monitoring of treatment system status.
2. Upgrade and replace up to three system transfer pumps that are inadequately sized and/or are otherwise not suited for use in their current application.
3. Provide upgrades to piping and valves as needed for system operations and pump access.
4. Start-up and testing of system modifications identified above.
5. Operator training, troubleshooting and follow-up operations support (up to 8 hours per month of on-site support for a period of up to 6 months).
6. Associated project management, meetings with client, etc.
7. Contingency funding of 10% is included to cover additional (out-of-scope) expenses that may be incurred during completion of the groundwater treatment system upgrade, including upgrade of unlisted item(s) that may be warranted due to identification of additional minor deficiencies that occur during completion of the work identified above. Additional funding will be required for any out-of-scope items that exceed this contingency amount.

Task 3.0 Periodic Review Report

The purpose of this task is to complete the Periodic Review Report (PRR) required by the New York State Department of Environmental Conservation (NYSDEC) for ongoing remedial program operations at the Site. A PRR has not been previously prepared or submitted for the Site, and as such, this initial PRR will cover the period from start-up to current operations.

The following scope of work is proposed by DAY to complete this report, and to provide a shell for future PRR submittals for this Site:

1. Prepare a draft PRR in general accordance with NYSDEC DER-10 requirements, with PRR sections to include:
    a. Identification, assessment and certification of the ECs/ICs required by the remedy for the Site;
    b. Results of required Site inspections and completed Site inspection forms;
    c. An overall site evaluation, which includes the following:
    d. The compliance of the remedy with respect to the requirements of the Site-specific Record of Decision (ROD);
    e. The operation and the effectiveness of all treatment units, etc., including identification of any needed repairs or modifications;
    f. Any new conclusions or observations regarding Site contamination based on inspections or data generated by the Monitoring Plan for the media being monitored;

g. Recommendations regarding any necessary changes to the remedy and/or Monitoring Plan; and the overall performance and effectiveness of the remedy.
h. A performance summary for all treatment systems at the Site during the calendar year, including information such as:
i. The number of days the system was run for the reporting period;
j. The average, high, and low flow rates;
k. An estimate of the contaminant mass removed;
l. A description of breakdowns and/or repairs along with an explanation for any significant downtime;
m. A description of the resolution of performance problems;
n. A summary of the performance, effluent and/or effectiveness monitoring; and
o. Comments, conclusions, and recommendations based on data evaluation.

2. A summary of discharge monitoring data and/or information generated during the reporting period with comments and conclusions (City to provide data summary tables);
3. Data summary tables for 2006 to present, which include a listing of all compounds analyzed, along with the applicable standards, with all exceedances highlighted (City to provide these data tables for all applicable monitoring completed over the reporting period, including groundwater/monitoring well data and treatment system influent and effluent monitoring data);
4. Results of all analyses, copies of all laboratory data sheets, and the required laboratory data deliverables for all samples collected during the reporting period (City to provide PDF copies of laboratory analytical reports – it is assumed that submittal of data in EQUIIS format will not be required);
5. Submit a draft electronic copy (PDF) of the PRR to the City for review and comment, and subsequently submit the PRR to the City and the NYSDEC.
6. Complete revisions to the PRR as needed based on City and/or NYSDEC comments.
7. Provide up to three hard-copies and one electronic Copy (PDF) of a final PRR, signed and sealed by a New York State licensed professional engineer, for submittal to NYSDEC and/or placement in local repository, as needed.
8. Provide follow-up assistance to the City for implementation of recommendations for changes to the Site monitoring plan and/or remedial plan, including Site documentation changes, development/revision of inspection forms, etc. (up to 16 hours of time is allotted for this).
9. Associated project management, meetings with client, etc.
10. Contingency funding of 10% is included to cover additional (out-of-scope) expenses that are incurred during completion of the PRR preparation, including compliance issues that may be identified during completion of the IC/EC certifications, and/or other Site review and evaluation activities. Additional funding will be required for any out-of-scope services that exceed this contingency amount.

Attachment #5

Rochester Fire Academy (RFA) Schedule 2013

TASK	March-13	April-13	May-13	June-13	July-13	August-13	September-13	October-13
Retrieve and Review RFA As Built Drawings and OM&M Volume I and II								
Solicit and Execute Proposal with Environmental Consultant								
Submit Monthly Progress Reports								
Initiate Preliminary Evaluation of Groundwater Treatment Plant Condition and Maintenance								
Initiate Preliminary Groundwater Treatment Plant Maintenance and Repairs								
Resume Manual Start-Up of Groundwater Treatment Plant								
Review and Inspect RFA Engineering Controls (e.g., Cover, Drainage. Etc.)								
Review RFA Instituational Controls								
Develop Compliance Plan with Recommendations for Groundwater Plant Repairs and Upgrades								
Complete RFA Semi-Annual Groundwater Monitoring Well Sampling								
Solicit Proposal from Environmental Consultant for Additional Maintenace and Repairs								
Initiate Additional Groundwater Treatment Plant Maintenance and Repairs and Operate Plant in Automated Mode								
Complete and Submit RFA PRR and Certifciation of Engineering and Institutional Controls								
Address Comments from NYSDEC								