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February 5, 2016

Mr. William Welling, Project Manager
New York State Department of Environmental Conservation
Division of Environmental Remediation
625 Broadway, 12th Floor
Albany, New York 12233 - 7013

Re: Mr. C's Dry Cleaners Site, Contract # D007617, Site # 915157
January Operations, Maintenance, and Monitoring Report

Dear Mr. Welling:

Ecology and Environment Engineering, P.C. (EEEPC) is pleased to provide the January 2016 Operations, Maintenance, and Monitoring (OM&M) Report for the Mr. C's Dry Cleaners Site, NYSDEC Site # 915157, located in the Village of East Aurora, New York. Copies of bi-monthly inspection reports prepared by EEEPC's subcontractor, Iyer Environmental Group, PLLC (IEG), are provided in Attachment A. Selected pages from the individual analytical data package prepared by Spectrum Analytical Inc. (SAI), Warwick, Rhode Island are provided as Attachment B and C. The full analytical reports along with QA/QC information will be retained by EEEPC. The site utility information is provided in Attachment D.

In review of the on-site treatment system operations, monitoring and maintenance for January 2016, EEEPC offers the following comments and highlights:

Operational Summary

Mr. C's Site – Remedial Operations and Maintenance Information

- The monthly checklists for system inspections from IEG are provided as Attachment A for 1/4/16, 1/8/16, and 2/1/16.
- Based on inspection reports prepared by IEG, the remedial treatment system for the period above had a 100% operational up-time (Table 1) and the treatment of contaminated groundwater during that period totaling of 305,578 gallons (Table 1) for January 2016.
- PW-7 was off due to injection operation.
- Swept spruce needles and cones off of the library parking lot around well groups PW-6 and PW-7.
- The bag filters were changed as needed during the operation period (January 4, 2016 to February 1, 2016).
- The 586 Building SVE fan was turned off to drain the water from pipe, and the 'T' fitting on top of exhaust pipe was installed. The inspection of SVE system of the 586 Main Street building was performed on January 21, 2016 and again January 26, 2016.

- The initial compliance samples were taken on January 13, 2016 (Attachment B) and the preliminary analytical results were received from SAI on January 21, 2016. The results indicated effluent discharges above the SPDES Equivalency permit requirements and corrective actions and resampling was requested the effluent discharge criteria requirements in the site specific SPDES Equivalency Permit is provided in the Table 2 and the initial results are provided in Table 3-1.
- The second compliance samples were taken on January 26, 2016 (Attachment C) and the analytical results were received from SAI on February 3, 2016. The results indicated achievement of the effluent discharge criteria requirements in the site specific SPDES Equivalency Permit are provided in Table 3-2.
- The analytical summary results of the January 2016 samples revealed the total volatile organic contaminant concentrations of the influent to be 692 µg/L or 692 ppb. In review of the effluent concentrations the results were 0 µg/L or 0 ppb. The summary of influent and effluent contaminant concentrations for the January 2016 sampling is presented in Table 1.
- The Mr. C's treatment system based on the total monthly flows removed 1.76 lbs. of targeted contaminants from the groundwater below the site in the month of January 2016 and the cleanup effectiveness was 100%. The calculations and data for the month are presented in Table 1.
- Installed vent cover over the man door for the season.
- Cleaned air stripper through access ports.

Subslab Depressurization Systems (SSDS) – First Presbyterian Church and 27 Whaley Ave. sites and Other Locations

- SSDS Unit manometer in the Mr. C's Treatment Bldg. (586 Main Street) maintained a subslab pressure ranging from -1.7 to -1.8 inches of water column over the reporting month of December 2015.
- The SVE fan on the west side of the 1st Presbyterian Church broke. The Church contacted EEEPC and the fan was replaced December 8. The church has EEEPC's contact information in case another problem occurs with the SSDS units.
- Property owners at 27 Whaley Ave. have not returned our calls for inspection of the SSDS unit. EEEPC will continue to contact to obtain access for inspection.
- The basement SSDS unit of the 591 Main Street location has been installed and is operational. 2nd SSDS unit installation on the first floor is scheduled for January 2016.
- Punch list review, communications testing, and post-construction air testing to be performed on three of the four locations was performed in March and April 2015. All post–construction results within acceptable depressurization requirements per NYSDOL. Final construction reports for the individual location where SSDS units were installed are to be issued in January 2016.

Status of Bioremediation Direct Push Injection Work

- Additional review of the recommendations in the summary report to be evaluated with the Remedial Site Optimization (RSO) program.
- The draft RSO was issued to NYSDEC on December 8, 2015.

Soil Vapor Intrusion Investigation Program ('15-'16)

- The Phase 3 SVII Report was issued to NYSDEC / NYSDOH on August 11, 2015.
- Discuss new property locations with NYSDEC / NYSDOH for SVII work in '15-'16.

Site Management Plan

- EEEPC submitted the updated/revised SMP to NYSDEC and NYSDEC Region 9 on March 2, 2015.
- This is an active site document, so future revisions will be performed once major changes to the management of the site are required after optimization evaluation is performed.

Annual Long-term Groundwater Monitoring Well Report

- The 2015 Annual Long-term Groundwater Monitoring Well field work was completed in October 2015.
- Report of 2015 annual Groundwater results was issued to NYSDEC on December 21, 2015.

Periodic Review Report (PRR)

- The 2015 Periodic Review Report was issued to NYSDEC on January 29, 2015.

Mr. C's Energy Usage Information

- A copy of the site utility costs from the Mr. C's remedial operations for January through December 2016 is provided as Attachment D.

If you have questions regarding the January 2016 OM&M report summary, please do not hesitate to contact me at 716-684-8060.

Very Truly Yours,
Ecology and Environment Engineering, P. C.

Michael G. Steffan
Project Manager

cc: D. Szymanski, Region 9, NYSDEC - Buffalo w/ attachments
D. Iyer, IEG – w/attachments
CTF- 10C3074.0011.07

Table 1
Mr. C's Dry Cleaners Site Remediation
Site #915157
System Operation and Management

Month	Up-time		Treated Effluent (gallon)	VOC Removal		
	Reporting Hours	Operational Up-time		Influent VOCs (µg/L)	Effluent VOCs(µg/L)	VOCs Removed (lbs.)
(Up-time from 9/5/02 to 01/04/16)	**111,949.50**	**95.23%**	**128,814,819**	**NA**	**NA**	**1,614.16**
January 4, 2016 - February 1, 2016	672	100.00%	305,578	692.0	0.0	1.76

Total in 2016	**672.00**	**1.00**	**305,578**	**692.00**	**0.00**	**1.76**
Total from startup	**112,621.50**	**0.95**	**129,120,397.00**	**NA**	**NA**	**1,615.93**

NOTES:

1. Up-time based as percentage of total reporting hours.
2. Treatment system operated by the Tyree Organization Ltd. from 9/02 - 9/03.
3. Treatment system operated by O&M Enterprises Inc. from 10/03 - 7/07.
4. Treatment system operated by Iyer Environmental Group from 7/07 to present.
5. VOC removal calculations are based on monthly water samples and assumes samples are representative of the entire reporting period.
6. VOC removal calculations assume that non-detect values = 0 ug/L.
7. Total VOCs summations include estimated "J" values.
8. VOC removal calculations are based on effluent totalizer readings.
9. "Influent VOCs" and "Effluent VOCs" values given above is the summation of values for individual compounds given in monthly analytical reports.
10. Unit conversion: 1 pound = 453.5924 grams, 1 gallon = 3.785 liters
11. Formula for the VOC removal calculation:

$(VOCs_{Influent} - VOCs_{Effluent})(ug/L) \cdot (1g/10^6 ug) \cdot (1\ lb/453.5924\ g) \cdot (Monthly\ process\ water)(gal) \cdot (3.785\ L/gallon)$

12. Using the 2/2/16 analytical results.

Table 2
Mr. C's Dry Cleaners Site Remediation
Site #915157
Effluent Discharge Criteria & Analytical Compliance Results

After Corrective Cleanup

Parameter/Analyte	Daily Maximum[1]	Units	January 13, 2016 - Effluent Analytical Values Compliance	January 26, 2016 - Effluent Analytical Values - Compliance
Flow (Average)	N/A	gpd	10,914	10,914
pH	6.0 - 9.0	standard units	7.40	7.40
1,1 Dichloroethene	10	µg/L	ND(<1.0)	ND(<1.0)
1,1 Dichloroethane	10	µg/L	ND(<1.0)	ND(<1.0)
cis-1,2-dichloroethene	10	µg/L	23	ND(<1.0)
Trichloroethene	10	µg/L	ND(<1.0)	ND(<1.0)
Tetrachloroethene	10	µg/L	27	ND(<1.0)
Vinyl Chloride	10	µg/L	ND(<1.0)	ND(<1.0)
Benzene	5	µg/L	ND(<1.0)	ND(<1.0)
Ethylbenzene	5	µg/L	ND(<1.0)	ND(<1.0)
Methylene Chloride	10	µg/L	ND(<1.0)	ND(<1.0)
1,1,1 Trichloroethane	10	µg/L	ND(<1.0)	ND(<1.0)
Toluene	5	µg/L	ND(<1.0)	ND(<1.0)
Methyl-t-Butyl Ether (MTBE)	NA	ug/L	2	ND(<1.0)
o-Xylene[2]	5	µg/L	NA	NA
m, p-Xylene[2]	10	µg/L	NA	NA
Total Xylenes	NA	ug/L	ND(<1.0)	ND(<1.0)
Iron, total	600	µg/L	NA[9]	NA[9]
Aluminum	4,000	µg/L	NA[9]	NA[9]
Copper	48	µg/L	NA[9]	NA[9]
Lead	11	µg/L	NA[9]	NA[9]
Manganese	2,000	µg/L	NA[9]	NA[9]
Silver	100	µg/L	NA[9]	NA[9]
Vanadium	28	µg/L	NA[9]	NA[9]
Zinc	230	µg/L	NA[9]	NA[9]
Total Dissolved Solids	850	mg/L	NA[9]	NA[9]
Total Suspended Solids	20	mg/L	NA[9]	NA[9]
Hardness	N/A	mg/L	330	330
Cyanide, Free	10	µg/L	NA[9]	NA[9]

NOTES:

1. "Daily Maximum" excerpted from Attachment E of Addendum 1 to the Construction Contract Documents dated October 2000.
2. Analytical report did not differentiate between o-Xylene and m, p-Xylene. Total Xylene value reported is given in each line.
3. Shaded cells indicate that analytical value exceeds the "Daily Maximum."
4. "ND" indicates that the compound was not detected and lists the practical quantitation limit in parentheses.
5. "NA" indicates that analyses were not performed and data is unavailable.
6. Average flows based on effluent readings: January 4, 2016 through February 1, 2016, Total gallons: 305,578 divided by 28 operating days.
7. "J" indicates an estimated value below the detection limit.
8. "B" indicates analyte found in the associated blank.
9. Removed from the required analysis list by NYSDEC Region 9 in February 2005.
10. "NS" indicates that the parameter analysis was not sampled.

40 **Indicates non-compliance with the NYSDEC effluent discharge requirements**
NR **Indicates Not Reported by Lab**

Table 3-1
Mr. C's Dry Cleaners Site Remediation
NYSDEC Site #915157
January 2016 VOC Analytical Summary

Compound	Based on the 1/13/16 Effluent Analytical Results				
	Influent Concentration* (ug/L)		Effluent Concentration** (ug/L)		Cleanup Efficiency*** (%)
Acetone	ND (<5)	U	ND (<5.0)	U	NA
Benzene	ND (<1.0)	U	ND (<1.0)	U	NA
2-Butanone	ND (<5)	U	ND (<5.0)	U	NA
cis-1, 2-Dichloroethene	210	E	23		89.05%
Chloroform	ND (<1.0)	U	ND (<1.0)	U	NA
Chloromethane	ND (<1.0)	U	ND (<1.0)	U	NA
Methylene chloride	ND (<1.0)	U	ND (<1.0)	U	NA
Methyl tert-butyl ether (MTBE)	3.9		2		48.72%
Methyl acetate	ND (<1.0)	U	ND (<1.0)	U	NA
Tetrachloroethene (PCE)	490	E	27		94.49%
Toluene	ND (<1.0)	U	ND (<1.0)	U	NA
Trichloroethene (TCE)	43.0		3.2		92.56%
Carbon Disulfide	ND (<1.0)	U	ND (<1.0)	U	NA
1,1,2 Trichloro-1,2,2-trifluororethane	ND (<1.0)	U	ND (<1.0)	U	NA
2-Hexanone	ND (<5)	U	ND (<5.0)	U	NA
4-Methyl-2-pentanone	ND (<5)	U	ND (<5.0)	U	NA
Cyclohexane	ND (<1.0)	U	ND (<1.0)	U	NA
trans-1,2-dichloroethene	1.4		ND (<1.0)	U	100.00%
Chlorobenzene	ND (<1.0)	U	ND (<1.0)	U	NA
Methylcyclohexane	ND (<1.0)	U	ND (<1.0)	U	NA
Ethylbenzene	ND (<1.0)	U	ND (<1.0)	U	NA
Methyl acetate	ND (<1.0)	U	ND (<1.0)	U	NA
Vinyl Chloride	11		ND (<1.0)	U	100.00%
Total Xylenes	ND (<1.0)	U	ND (<1.0)	U	NA
• The 1st progress monitoring sampling of the groundwater wells associated with the "pilot" bioaugmentation program was performed on July 1-2, 2013.	**759.3**		**55.20**		**92.73%**

Notes:
1. "NA" = Not applicable
2. "U" = Compound analyzed, but was not detected. Detection limit in parentheses.
3. "DJ" or "J" indicates an estimated value below the practical quantitation limit but above the method detection limit.
4. Non-detect values are assumed to be equal to zero for calculation of monthly average concentrations.
5. "D" indicates the compound concentration was obtained form a secondary dilution analysis.
6. Acetone was not detected in the influent sample above the MDL but detected in the effluent sample. It is not a contaminant of concern for the Mr. C's site.

* Detection Limits (<10) and (<50)
** Detection Limits (<1) and (<5)
*** Contaminants of Concern only

Table 3-2
Mr. C's Dry Cleaners Site Remediation
NYSDEC Site #915157
January 2016 VOC Analytical Summary

Compound	Based on the 1/26/16 Effluent Analytical Results				
	Influent Concentration* (ug/L)		Effluent Concentration** (ug/L)		Cleanup Efficiency*** (%)
Acetone	ND (<20)	U	ND (<5.0)	U	NA
Benzene	ND (<4.0)	U	ND (<1.0)	U	NA
2-Butanone	ND (<20)	U	ND (<5.0)	U	NA
cis-1, 2-Dichloroethene	210		ND (<1.0)	U	100.00%
Chloroform	ND (<4.0)	U	ND (<1.0)	U	NA
Chloromethane	ND (<4.0)	U	ND (<1.0)	U	NA
Methylene chloride	ND (<4.0)	U	ND (<1.0)	U	NA
Methyl tert-butyl ether (MTBE)	ND (<4.0)	U	ND (<1.0)	U	NA
Methyl acetate	ND (<4.0)	U	ND (<1.0)	U	NA
Tetrachloroethene (PCE)	430		ND (<1.0)	U	100.00%
Toluene	ND (<4.0)	U	ND (<1.0)	U	NA
Trichloroethene (TCE)	39.0		ND (<1.0)	U	100.00%
Carbon Disulfide	ND (<4.0)	U	ND (<1.0)	U	NA
1,1,2 Trichloro-1,2,2-trifluororethane	ND (<4.0)	U	ND (<1.0)	U	NA
2-Hexanone	ND (<20)	U	ND (<5.0)	U	NA
4-Methyl-2-pentanone	ND (<20)	U	ND (<5.0)	U	NA
Cyclohexane	ND (<4.0)	U	ND (<1.0)	U	NA
trans-1,2-dichloroethene	ND (<4.0)	U	ND (<1.0)	U	NA
Chlorobenzene	ND (<4.0)	U	ND (<1.0)	U	NA
Methylcyclohexane	ND (<4.0)	U	ND (<1.0)	U	NA
Ethylbenzene	ND (<4.0)	U	ND (<1.0)	U	NA
Methyl acetate	ND (<4.0)	U	ND (<1.0)	U	NA
Vinyl Chloride	13		ND (<1.0)	U	100.00%
Total Xylenes	ND (<4.0)	U	ND (<1.0)	U	NA
• The 1st progress monitoring sampling of the groundwater wells associated with the "pilot" bioaugmentation program was performed on July 1-2, 2013.	**692.0**		**0.00**		**100.00%**

Notes:
1. "NA" = Not applicable
2. "U" = Compound analyzed, but was not detected. Detection limit in parentheses.
3. "DJ" or "J" indicates an estimated value below the practical quantitation limit but above the method detection limit.
4. Non-detect values are assumed to be equal to zero for calculation of monthly average concentrations.
5. "D" indicates the compound concentration was obtained form a secondary dilution analysis.
6. Acetone was not detected in the influent sample above the MDL but detected in the effluent sample. It is not a contaminant of concern for the Mr. C's site.

* Detection Limits (<10) and (<50)
** Detection Limits (<1) and (<5)
*** Contaminants of Concern only

Attachment A
IEG Weekly Inspection Reports
January 2016

Including:

1/4/16

1/8/16

2/1/16

MR. C's DRY CLEANERS SITE
NYSDEC Site #9-15-157
OM&M: SITE INSPECTION FORM

DATE: 4-Jan-16 ACTIVITIES: Site Inspection

INSPECTION PERSONNEL: R. Allen OTHER PERSONNEL: ---

WEATHER CONDITIONS: Cloudy, cold OUTSIDE TEMPERATURE (° F): 12

ARE WELL PUMPS OPERATING IN AUTO: YES: NO: If "NO", provide explanation below

PW-7 is OFF due to injection operation.

PROVIDE WATER LEVEL READINGS ON CONTROL PANEL

RW-1	ON:		OFF: √	7 ft	PW-5	ON: √	OFF:	6 ft	
PW-2	ON:		OFF: √	6 ft	PW-6	ON:	OFF: √	6 ft	
PW-3	ON:		OFF: √	4 ft	PW-7	ON: √	OFF:	12 ft	
PW-4	ON:		OFF: √	3 ft	PW-8	ON:	OFF: √	5 ft	

EQUALIZATION TANK: 3 ft Last Alarm D/T/Condition: 1/4/2016 PW-2 Overload

NOTES:

INFLUENT FLOW RATE: 1 gpm INFLUENT TOTALIZER READING 15,349,000.0 gallons

SEQUESTERING AGENT DRUM LEVEL: 4 inches (x 1.7=) AMOUNT OF AGENT REMAINING: 7 gallons

SEQUESTERING AGENT FEED RATE: ml/min METERING PUMP PRESSURE: psi

		Top	Bottom			Top	Bottom	
BAG FILTER PRESSURES:	LEFT:	15 - 0	0	psi	RIGHT:	25 - 8	0	psi

INFLUENT FEED PUMP IN USE: #1 √ #2 INFLUENT PUMP PRESSURE: 6 psi

AIR STRIPPER BLOWER IN USE: #1 √ #2 AIR STRIPPER PRESSURE: 47.0 in. H_2O

AIR STRIPPER DIFFERENTIAL PRESSURE: broken in. H_2O DISCHARGE PRESSURE: < 0.0 in. H_2O

AIR FLOW : 388 fpm X 1.4 = 543 CFM

EFFLUENT PUMP IN USE: #1 #2 √ EFFLUENT FEED PUMP PRESSURE: 11 psi

EFFLUENT FLOW RATE: 144 gpm EFFLUENT TOTALIZER READING: 80,490,578 | 100330 gallons

ARE BUILDING HEATERS IN USE? YES: √ NO: INSIDE TEMPERATURE (° F): 65

IS SUMP PUMP IN USE: YES: √ NO: ARE ANY LEAKS PRESENT? YES: √ NO:

WATER LEVEL IN SUMP: 6.0 in. TREATMENT BUILDING CLEAN & ORGANIZED? YES: √ NO:

MR. C's DRY CLEANERS SITE
NYSDEC Site #90150157
SITE INSPECTION FORM

4-Jan-16

SAMPLES COLLECTED? YES: _____ NO: _____

	Sample ID	Time of Sampling	pH	Turbidity	Temp.	Sp. Cond.
AIR STRIPPER INFLUENT:						
AIR STRIPPER EFFLUENT:						

IS THERE EVIDENCE OF TAMPERING/VANDALISM OF WELLS: ?	YES:	NO: √
WERE MANHOLES INSPECTED?	YES: √	NO:
WERE ELECTRICAL BOXES INSPECTED?	YES: √	NO:
IS WATER PRESENT IN ANY MANHOLES OR ELECTRICAL BOXES?	YES:	NO: √

If yes, provide manhole/electric box ID and description of any corrective measures below:

PZ-1B has surface concrete damage from winter conditions.

Most MWs and UEs are covered with ice and snow.

SUBSLAB SYSTEM

MANOMETER: 1.7 **in. WC** (Fan Inlet)

	west	east
FLOW (fpm):		
FLOW (cfm):		
VACUUM GAUGE (in WC)		

NOTES: cfm = 0.05 x fpm (3" PVC)

INCLUDE REMARKS & DESCRIBE ANY OTHER SYSTEM MAINTENANCE PERFORMED ON MR. C's SITE

Remarks: Ball valve near filter housings has a drip leak.

Have sample kit.

Other Actions: Change Bag Filters.

Mixed (3) drums of 1:3 Redux to water.

586 Main St SVE Fan - drained pipe and turned ON when thawed.

AGWAY

Remarks: Site is empty of materials and has been graded and graveled.

Other Actions:

MR. C's DRY CLEANERS SITE
NYSDEC Site #9-15-157
OM&M: SITE INSPECTION FORM

DATE: 18-Jan-15 ACTIVITIES: Site Inspection

INSPECTION PERSONNEL: R. Allen OTHER PERSONNEL: E & E, Inc.

WEATHER CONDITIONS: Partly cloudy, cold OUTSIDE TEMPERATURE (° F): 18

ARE WELL PUMPS OPERATING IN AUTO: YES: NO: √ If "NO", provide explanation below

PW-7 is OFF due to injection operation.

PROVIDE WATER LEVEL READINGS ON CONTROL PANEL

RW-1	ON:		OFF:	√	7 ft	PW-5	ON:	√	OFF:	6 ft
PW-2	ON:		OFF:	√	5 ft	PW-6	ON:		OFF:	√	5 ft
PW-3	ON:		OFF:	√	7 ft	PW-7	ON:	√	OFF:	12 ft
PW-4	ON:		OFF:	√	3 ft	PW-8	ON:	√	OFF:	4 ft

EQUALIZATION TANK: 4 ft Last Alarm D/T/Condition: 1/18/16 PW-2 Overload

NOTES:

INFLUENT FLOW RATE: 29 gpm INFLUENT TOTALIZER READING 11,765,704.0 gallons

SEQUESTERING AGENT DRUM LEVEL: 29 inches (x 1.7=) AMOUNT OF AGENT REMAINING: 49 gallons

SEQUESTERING AGENT FEED RATE: ml/min METERING PUMP PRESSURE: 4.0 psi

BAG FILTER PRESSURES:		Top	Bottom			Top	Bottom	
	LEFT:	0	0	psi	RIGHT:	8	0	psi

INFLUENT FEED PUMP IN USE: #1 √ #2 INFLUENT PUMP PRESSURE: 6 psi

AIR STRIPPER BLOWER IN USE: #1 √ #2 AIR STRIPPER PRESSURE: 47.0 in. H_2O

AIR STRIPPER DIFFERENTIAL PRESSURE: broken in. H_2O DISCHARGE PRESSURE: < 0.0 in. H_2O

AIR FLOW : 335 fpm X 1.4 = 470 CFM

EFFLUENT PUMP IN USE: #1 #2 √ EFFLUENT FEED PUMP PRESSURE: 10 psi

EFFLUENT FLOW RATE: 143 gpm EFFLUENT TOTALIZER READING: 80,676,581 286680 gallons

ARE BUILDING HEATERS IN USE? YES: √ NO: INSIDE TEMPERATURE (° F): 71

IS SUMP PUMP IN USE: YES: √ NO: ARE ANY LEAKS PRESENT? YES: √ NO:

WATER LEVEL IN SUMP: 7.0 in. TREATMENT BUILDING CLEAN & ORGANIZED? YES: √ NO:

MR. C's DRY CLEANERS SITE
NYSDEC Site #90150157
SITE INSPECTION FORM

18-Jan-15

SAMPLES COLLECTED? YES: _____ NO: √

	Sample ID	Time of Sampling	pH	Turbidity	Temp.	Sp. Cond.
AIR STRIPPER INFLUENT:						
AIR STRIPPER EFFLUENT:						

IS THERE EVIDENCE OF TAMPERING/VANDALISM OF WELLS: ? YES: _____ NO: √

WERE MANHOLES INSPECTED? YES: √ NO: _____

WERE ELECTRICAL BOXES INSPECTED? YES: √ NO: _____

IS WATER PRESENT IN ANY MANHOLES OR ELECTRICAL BOXES? YES: _____ NO: √

If yes, provide manhole/electric box ID and description of any corrective measures below:

PZ-1B has surface concrete damage from winter conditions.

Most MWs and UEs are covered with ice and snow.

SUBSLAB SYSTEM

MANOMETER: 1.7 **in. WC** (Fan Inlet)

	west	east
FLOW (fpm):		
FLOW (cfm):		
VACUUM GAUGE (in WC)		

NOTES: cfm = 0.05 x fpm (3" PVC)

INCLUDE REMARKS & DESCRIBE ANY OTHER SYSTEM MAINTENANCE PERFORMED ON MR. C's SITE

Remarks: Ball valve near filter housings has a drip leak.

Other Actions: Changed Bag Filters.

Cleaned Air Stripper through access ports.

Instal vent cover over man door for the season.

586 Main St SVE Fan - drain water from pipe.

AGWAY

Remarks: Site is empty of materials and has been graded and graveled.

Other Actions:

MR. C's DRY CLEANERS SITE
NYSDEC Site #9-15-157
OM&M: SITE INSPECTION FORM

DATE: 1-Feb-16 ACTIVITIES: Site Inspection

INSPECTION PERSONNEL: R. Allen OTHER PERSONNEL:

WEATHER CONDITIONS: Partly cloudy, cool OUTSIDE TEMPERATURE (°F): 39

ARE WELL PUMPS OPERATING IN AUTO: YES: NO: √ If "NO", provide explanation below

PW-7 is OFF due to injection operation.

PROVIDE WATER LEVEL READINGS ON CONTROL PANEL

RW-1	ON:		OFF:	√	3 ft	PW-5	ON:		OFF: √ 5 ft
PW-2	ON:		OFF:	√	4 ft	PW-6	ON:		OFF: √ 4 ft
PW-3	ON:		OFF:	√	3 ft	PW-7	ON:	√	OFF: 12 ft
PW-4	ON:	√	OFF:		7 ft	PW-8	ON:		OFF: √ 7 ft

EQUALIZATION TANK: 3 ft Last Alarm D/T/Condition: 2/1/2016 PW-2 Overload

NOTES:

INFLUENT FLOW RATE: 2 gpm INFLUENT TOTALIZER READING 11,911,400 gallons

SEQUESTERING AGENT DRUM LEVEL: 16 inches (x 1.7=) AMOUNT OF AGENT REMAINING: 27 gallons

SEQUESTERING AGENT FEED RATE: ml/min METERING PUMP PRESSURE: 4.0 psi

BAG FILTER PRESSURES:	Top	Bottom		Top	Bottom	
LEFT:	0	0	psi	RIGHT: 8	0	psi

INFLUENT FEED PUMP IN USE: #1 √ #2 INFLUENT PUMP PRESSURE: 6 psi

AIR STRIPPER BLOWER IN USE: #1 √ #2 AIR STRIPPER PRESSURE: 29.0 in. H_2O

AIR STRIPPER DIFFERENTIAL PRESSURE: broken in. H_2O DISCHARGE PRESSURE: 1.80 in. H_2O

AIR FLOW: 1300 fpm X 1.4 = 1820 CFM

EFFLUENT PUMP IN USE: #1 #2 √ EFFLUENT FEED PUMP PRESSURE: 10 psi

EFFLUENT FLOW RATE: 136 gpm EFFLUENT TOTALIZER READING: 80,796,156 | 407930 gallons

ARE BUILDING HEATERS IN USE? YES: √ NO: INSIDE TEMPERATURE (°F): 65

IS SUMP PUMP IN USE: YES: √ NO: ARE ANY LEAKS PRESENT? YES: NO: √

WATER LEVEL IN SUMP: 7.0 in. TREATMENT BUILDING CLEAN & ORGANIZED? YES: √ NO:

MR. C's DRY CLEANERS SITE
NYSDEC Site #90150157
SITE INSPECTION FORM

1-Feb-16

SAMPLES COLLECTED? YES: _____ NO: √

	Sample ID	Time of Sampling	pH	Turbidity	Temp.	Sp. Cond.
AIR STRIPPER INFLUENT:						
AIR STRIPPER EFFLUENT:						

IS THERE EVIDENCE OF TAMPERING/VANDALISM OF WELLS: ? YES: _____ NO: √

WERE MANHOLES INSPECTED? YES: √ NO: _____

WERE ELECTRICAL BOXES INSPECTED? YES: √ NO: _____

IS WATER PRESENT IN ANY MANHOLES OR ELECTRICAL BOXES? YES: √ NO: _____

If yes, provide manhole/electric box ID and description of any corrective measures below:

PZ-1B has surface concrete damage from winter conditions. PZ-4B, PZ-6A and PZ-6C have been damaged by Town of Aurora. PZ-4B has been improperly repaired by the Town of Aurora.

SUBSLAB SYSTEM

MANOMETER: 1.8 **in. WC** (Fan Inlet)

	west	east
FLOW (fpm):		
FLOW (cfm):		
VACUUM GAUGE (in WC)		

NOTES: cfm = 0.05 x fpm (3" PVC)

INCLUDE REMARKS & DESCRIBE ANY OTHER SYSTEM MAINTENANCE PERFORMED ON MR. C's SITE

Remarks: M. Steffan - 586 Building SVE Fan: put "T" pipe over exhaust. Inspect horizontal pipe for direction of slope.

Other Actions: Swept spruce needles and cones off of the Librarty Parking Lot around well groups PW-6 and PW-7.

Shoveled snow off of MWs and Piezometers.

586 Building SVE Fan: installed "T" fitting on top of exhaust pipe.

Unit #4 - inspected horizontal length of SVE pipe above the ceiling panels. Pronounced 11/2' slope from Utility Room down to elbow at outside wall below fan.

AGWAY

Remarks: Site is empty of materials and has been graded and graveled.

Other Actions:

Mr. C's CLEANERS OM&M

SUMMARY OF FIELD ACTIVITIES BY IEG - 1/2016

DATE	ACTIVITY
4-Jan	OM&M Weekly Inspection. End of month summaries.
5-Jan	Changed bag filters. OM&M office work.
6-Jan	Turn 586 Building SVE Fan off. Mix (3) drums of 1:3 Redux to Water. Clean air intake vent above Man Door.
8-Jan	OM&M office work. 586 Building SVE Fan - drain pipe and start up.
11-Jan	OM&M Weekly Inspection. Shovel snow in front of Treatment Room. Inspect AutoDialer.
13-Jan	OM&M Sampling.
15-Jan	586 Building SVE Fan- drain pipe. Install vent cover over Man Door.
18-Jan	OM&M Weekly Inspection.
20-Jan	Changed Bag Filters. Air Stripper- clean with steel brushes.
21-Jan	Get Supplies. Air Stripper- clean with steel brush and concrete vibrator. Inspect 586 Building SVE System. Install electric heater at Southwest corner. Notified IAE, Inc. of frozen water line.
22-Jan	Air Stripper- clean with Power Washer and vacuum. Get Supplies.
25-Jan	Air Stripper- clean with vacuum. Shovel snow off of piezometers. OM&M Weekly Inspection.
26-Jan	Clean Treatment Room. Inspect 586 Building SVE System with NYSDEC and E&E, Inc. Take Performance Samples.
28-Jan	Get Supplies. Attempt Piezometer Readings - wells are frozen. Inspect 586 Building SVE pipe. Attach exhaust extension and fitting above SVE Fan.

Mr. C's CLEANERS OM&M
STATUS OF FIELD ACTIVITIES BY IEG - 1/2016

ACTIVITY	DESCRIPTION	COMPLETION DATE/STATUS
PW-4 UE Level	Asphalt around Underground Enclosure has sunk, leaving it vulnerable to damage. Bring parking lot up to level with asphalt patch.	in progress
Rebuild JAC Pump as needed	Jesco America Corp recommends rebuilding the Redux pump when needed. Purchased rebuild kit.	in progress
Brace Effluent Pipe	David Szymanski (NYSDEC) inspected Treatment Room and said that the effluent pipe should be braced in (3) places to the north wall.	in progress
Inspect and clean Manholes	Inspect manholes near operating pumps. Pump out water in manholes and clean out remaining sediment and other material.	in progress
Trim Broken Piezometers	Many of the piezometers are broken. Measuring water levels is not precise when a pipe is broken. Identify and trim all broken piezometers.	in progress
Cool Treatment Room	Temperature in Treatment Room is well above 90 degrees during the summer months. Need to increase outside air inflow to the room.	in progress
Filter Housings are corroded	Flanges that seal filter baskets inside Rosedale Filter Housings are corroded. Sediment flows around filters instead of being trapped. Replace seals in existing housings (short term). Replace housings (long term).	in progress
Replace Air Stripper Latches	Around (6) latches on the Air Stripper trays are loose or broken. Reattach keepers with JB Weld. Replace broken latches and springs with new parts.	in progress
Repair Leaking Ball Valve	Influent ball valve near east side of EQ Tank drips. Inspect/clean and replace if necessary.	in progress
PZ-1B has damage	PZ-2B has surface concrete damage from severe winter conditions this year. Repair chipped concrete with epoxy material.	in progress
Redux usage rapidly increased	The rate of Redux usage increased rapidly during the past several months despite turning the Jesco Pump settings to their lowest levels. Clean pump and test. Adjust clamps on Redux line. Replace pump if necessary.	in progress
Reduce Influent Pump Rate	Lab Tests have shown high levels of VOCs. Try lengthening the time that the Influent Pump runs to increase the Air Sparging time inside the Air Stripper	in progress
Add Air Sparging System	Lab Tests have shown high levels of VOCs. Try adding an Air Sparging system to the sump box of the Air Stripper to increase the treatment of the effluent.	in progress
South Wall should be sealed	South Wall of Treatment Room has leaked into the neighboring unit several times when there have been water related problems. Trim wall insullation matting to reduce moisture retension. Seal base of wall with silicone caulking.	in progress
PW-8 Maintenance	Pull up transducer, pump and vertical pipe. Clean, inspect and reinstall.	Sep-15
PW-6 does not run	Replace transducer and well pump with more powerful model. Cleaned vertical pipe and Underground Enclosure. Replaced corroded connectors in UE.	Sep-15
PW-2 Maintenance	Pull up transducer, pump and vertical pipe. Clean, inspect and reinstall.	Sep-15
PW-3 does not run	Cleaned vertical pipe, transducer and Underground Enclosure. Replaced corroded connectors in UE. Replaced with new pump.	Oct-15
Church Fan Complaint	West SVE fan is not working. Inspect and clean connections inside unit. If fan continues to go off, replace unit. Replaced unit.	Dec-15
Blower Pipe pulled apart	The Blower Pipe between Blower #1 and Blower #2 pulled apart at the fitting. Readjust pipe and secure with flashing, straps and duct tape.	Dec-16
SVE Fan pipe collects water	The SVE Fan pipe on Building 586 collects water. There is a plug just below the fan to drain water out of the horizontal section of the pipe. Inspect system and make corrections to prevent the pipe from filling with water.	in progress
PW-2 Well Pump not operating	Inspect well pump and find that it shorted out. Replace well pump with new unit.	Dec-15

Mr. C's CLEANERS OM&M

SUMMARY OF WATER PUMP MAINTENANCE BY IEG - 2016

as of Jan 2016

ID	CLEAN & INSPECT PUMP	REPLACED PUMP	REPAIR PUMP	PITLESS ADAPTER	INNER RING	HORIZONTAL PIPE	CHECK VALVE	CLEAN & INSPECT TRANSDUCER	REPLACE TRANSDUCER	REPLACE ANEROID BELLOWS	PUMP OUT WELL	CLEAN OUT & INSPECT ELECTRICAL BOX	ELECTRICAL BOX REPAIR
RW - 1	Jan 08, May 10, Jan 12, Oct 15	Feb 08, Jan 12	May 10, Nov 08					May 10, Jan 12, Oct 15					
PW - 2	Jun 08, Aug 09, May 10, Apr 13, Sep 15	Jul 08, Apr 13 Dec 15				Sep-15		Nov 11, May 10, Apr 13 Dec 15	Sep 09, Dec 11		Aug-09	Nov-11	Sep-09
PW - 3	Jun 08, Aug 09, May 10, Sep 15	Jul 08, Dec 11, Oct 15		Repair adapter		Sep-15		Aug 09, Nov 11, Oct 15	Dec 11, Sep 15		Aug-09	Nov 11, Sep 15	
PW - 4	Dec 07, May 08, Sep 09, May 10, Jan 12, Oct 15	Dec 07, Jan 12	Sep-13		Aug 13			May 10, Nov 11, Oct 15	Dec 11, Mar 08, Sep 08		Jul 09, Sep 09	Sep 09, Nov 11	Sep-09
PW - 5	Jan 12, May 08, Oct 15	Jul 08, Jan 12						Mar 11, Oct 15	Jan 12, Sep 08			Jan-12	
PW - 6	Jun 08, Jul 09, Jul 12, Nov 12, Aug 15	Jun 08, Jul 09, Aug 12, Nov 12, Sep 15		Replaced Aug 15		Jul 12, Nov 12, Sep 15	Aug 15	Aug 09, Jul 12, Dec 12, Apr 13, Aug 15	Sep 09, Sep 15	Aug 15	Aug-09	Aug 09, Sep 09, Sep 15	Jul 09, Sep 09
PW - 7	Jun 08, Jul 09, May 10, Oct 10, Aug 11, Mar 12, Jul 12, Nov 12, Aug 15	Nov 07, Jul 09, Oct 10, Nov 12		Replaced Aug 15		Jul 12, Nov 12	Aug 15	Oct 10, Aug 11, Mar 12, Jul 12, Dec 12, Aug 15			Aug 09, May 10, Aug 11		
PW - 8	Jun 08, Aug 09, May 10, Aug 11, Jul 12, Dec 12, Aug 15	Jul 08, Sep 09, Aug 11, Dec 12		Replaced Aug 15		Pipe 8/09, Jul 12, Sep 15	Aug 15	May 10, Aug 11, Jul 12, Dec 12, Apr 13, Aug 15		Aug 15	Aug 09, May 10, Aug 11	Apr 13, Aug 15	Apr-13

Mr. C's CLEANERS OM&M

SUMMARY OF WATER PUMP STATUS - 2016

as of Jan 2016

ID	NEEDS CLEANING & INSPECTION	NEEDS NEW PUMP	NEEDS NEW INNER RING	NEEDS P.A. OR PIPE	NEEDS WELL CLEAN-OUT	PITLESS ADAPTER	NEEDS HORIZONTAL LINE PURGE	NEEDS CHECK VALVE INSPECTION	NEEDS TRANSDUCER INSPECTION	NEEDS NEW TRANSDUCER	NEEDS ANEROID BELLOWS	NEEDS U.E. CLEANED	NEEDS U.E. REPAIR
RW-1	NO	NO	PZ-1B		**YES**				NO	NO	NO	NO	YES - bolts
PW-2	NO	NO	NO		**NO**				NO		NO	NO	YES - bolts
PW-3	NO	NO	NO						NO		NO	NO	NO
PW-4	NO	NO	PZ-4B						NO		NO	NO	YES - Asphalt patch
PW-5	NO	NO	NO		YES				NO			NO	NO
PW-6	NO	NO	NO				NO		NO	NO	NO	NO	DONE
PW-7	YES	NO	NO		NO		NO		NO	NO		NO	NO
PW-8	NO	NO	NO		NO		NO		NO	NO	NO	NO	NO

MR. C's DRY CLEANERS SITE
NYSDEC Site #9-15-157
OM&M: PIEZOMETER WATER LEVEL LOG

Date: 2-Feb-16 **Measurements taken by:** R. Allen

RW-1	17.50 ft	Comments:		PW-5	16.10 ft	Comments:	
PZ-1A	------ ft	Comments:	Auto parked over	PZ-5A	10.53 ft	Comments:	
PZ-1B	10.79 ft	Comments:		PZ-5B	10.61 ft	Comments:	
PZ-1C	12.15 ft	Comments:		PZ-5C	10.20 ft	Comments:	
PZ-1D	12.32 ft	Comments:		PZ-5D	11.00 ft	Comments:	
PW-2	14.50 ft	Comments:		PW-6	15.80 ft	Comments:	
PZ-2A	10.83 ft	Comments:		PZ-6A	11.54 ft	Comments:	
PZ-2B	11.14 ft	Comments:		PZ-6B	11.41 ft	Comments:	
PZ-2C	10.61 ft	Comments:		PZ-6C	11.64 ft	Comments:	
MW-7	11.16 ft	Comments:	Substitute for 2D	PZ-6D	11.38 ft	Comments:	Shown as RW-2 on map
PW-3	------ ft	Comments:	Auto parked over	PW-7	------ ft	Comments:	injection operation
PZ-3A	11.29 ft	Comments:		MPI-6S	------ ft	Comments:	injection operation
PZ-3B	11.37 ft	Comments:		PZ-7B	11.17 ft	Comments:	
PZ-3C	11.91 ft	Comments:		OW-B	11.08 ft	Comments:	
PZ-3D	11.38 ft	Comments:		PZ-7D	------ ft	Comments:	injection operation
PW-4	19.20 ft	Comments:		PW-8	19.80 ft	Comments:	
PZ-4A	10.97 ft	Comments:		PZ-8A	8.11 ft	Comments:	
PZ-4B	10.66 ft	Comments:		PZ-8B	8.03 ft	Comments:	
PZ-4C	------ ft	Comments:	sealed over	PZ-8C	7.69 ft	Comments:	
PZ-4D	10.28 ft	Comments:		PZ-8D	7.92 ft	Comments:	

PUMPS IN OPERATION DURING MEASUREMENTS

RW-1 pump on?	Yes	No	PW-5 pump on?	Yes	No
PW-2 pump on?	Yes	No	PW-6 pump on?	Yes	No
PW-3 pump on?	Yes	No	PW-7 pump on?	Yes	No
PW-4 pump on?	Yes	No	PW-8 pump on?	Yes	No

Attachment B
Analytical Report from
Spectrum Analytical Laboratories

Analytical Data Package Work Order ID: R0032
Sampled by IEG: January 13, 2016
Received by Lab: January 15, 2016
Date of Final Report: January 21, 2016

eurofins | Spectrum Analytical

☑ Final Report
☐ Re-Issued Report
☐ Revised Report
Report Date:
21-Jan-16 16:30

Laboratory Report

Ecology and Environment Engineering P.C.
368 Pleasant View Drive
Lancaster, NY 14086

Work Order: R0032
Project : Mr. C's Dry Cleaning
Project #: 1703074.0011

Attn: Michael Steffan

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
R0032-01	INFLUENT	Aqueous	13-Jan-16 12:00	15-Jan-16 11:10
R0032-02	EFFLUENT	Aqueous	13-Jan-16 12:00	15-Jan-16 11:10

I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. The results relate only to the samples(s) as received. This report may not be reproduced, except in full, without written approval from Spectrum Analytical.

All applicable NELAC or USEPA CLP requirments have been meet.

Eurofins Spectrum Analytical (ESA-RI) is accredited under the National Environmental Laboratory Approval Program (NELAP) and DoD Environmental Laboratory Accreditation Program (ELAP), holds Organic and Inorganic contracts under the USEPA CLP Program and is certified under several states. The current list of our laboratory approvals and certifications is available on the Certifications page on our web site at www.spectrum-analytical.com.

Please contact the Laboratory or Technical Director at 401-732-3400 with any questions regarding the data contained in the laboratory report.

Department of Defense	N/A
Connecticut	PH-0153
Delaware	N/A
Florida	E87664
Massachusetts	M-RI907
New Hampshire	2060
New Jersey	RI001
New York	11522
Rhode Island	LAI00349
USDA	P330-08-00023
USEPA - ISM	EP-W-14-032
USEPA - SOM	EP-W-14-032

NELAP ACCREDITED TNI LABORATORY

LABORATORY ACCREDITATION BUREAU ACCREDITED
Certificate # L2247 Testing

Authorized by:

Yihai Ding
Laboratory Director

Sample Transmittal Documentation

R0032

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

Page 1 of 1

CHAIN OF CUSTODY RECORD

☐ 11 Almgren Drive, Agawam, MA 01001, (413) 789-9018
☐ 8405 Benjamin Road, Ste A, Tampa, FL 33634, (813) 888-9507
☒ 646 Camp Avenue, N Kingstown, RI 02852, (401) 732-3400

Special Handling:

TAT- Ind icate Date Needed: Std
- All TATs subject to laboratory approval. Min. 24-hour notification needed for rushes.
- Samples disposed of after 60 days unless otherwise instructed.

Report To: E&E, Inc
368 Pleasantview Dr
Lancaster, NY 14086

Telephone #: (716) 684-8060
Project Mgr. Mike Steffan

Invoice To: E&E, Inc

P.O. No.: _____ RQN: _____

Project No.: _____
Site Name: MRCS OM&M
Location: East Aurora State: NY
Sampler(s): R. Allen

1=$Na_2S_2O_3$ 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=Ascorbic Acid 7=CH_3OH
8= $NaHSO_4$ 9= Deionized Water 10=H_3PO_4 11= _____ 12= _____

List preservative code below: — | 4 | 2

QA/QC Reporting Notes:

DW=Drinking Water GW=Groundwater WW=Wastewater
O=Oil SW= Surface Water SO=Soil SL=Sludge A=Air
X1= _____ X2= _____ X3= _____

R0032 G=Grab C=Composite

Lab Id:	Sample Id:	Date:	Time:	Type	Matrix	Containers: # of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	Analyses: pH	Hardness	VOCs
01	INFLUENT	Jan 13, 2016	12:00 P	G	GW				1	✓		
	INFLUENT	↓	↓	G	GW				1		✓	
	INFLUENT			G	GW	3						✓
02	EFFLUENT			G	GW				1	✓		
	EFFLUENT			G	GW				1		✓	
	EFFLUENT	↓	↓	G	GW	3						✓

QA/QC Reporting Level
☐ Level I ☐ Level II
☐ Level III ☐ Level IV
☒ Other CAT A

State-specific reporting standards: _____

Please send another sample kit

Relinquished by:	Received by:	Date:	Time:	Temp°C
Richard C Allen Jr	[signature]	1/15/16	10:18	5.5

☒ EDD Format PDF
☒ E-mail to msteffan@ene.com

Condition upon receipt: Custody Seals: ☐ Present ☐ Intact ☐ Broken
☐ Ambient ☒ Iced ☐ Refrigerated ☐ DI VOA Frozen ☐ Soil Jar Frozen

Page 3 of 38

Revised Feb 2013

* Volatiles *

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

INFLUENT

Lab Name: EUROFINS SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: ESAI-RI Case No.: R0032 Mod. Ref No.: SDG No.: SR0032

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: R0032-01C

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V5Q6614.D

Level: (TRACE/LOW/MED) LOW Date Received: 01/15/2016

% Moisture: not dec. Date Analyzed: 01/15/2016

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	1.0	U
74-87-3	Chloromethane	1.0	U
75-01-4	Vinyl chloride	11	
74-83-9	Bromomethane	1.0	U
75-00-3	Chloroethane	1.0	U
75-69-4	Trichlorofluoromethane	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U
67-64-1	Acetone	5.0	U
75-15-0	Carbon disulfide	1.0	U
75-09-2	Methylene chloride	1.0	U
156-60-5	trans-1,2-Dichloroethene	1.4	
1634-04-4	Methyl tert-butyl ether	3.9	
75-34-3	1,1-Dichloroethane	1.0	U
78-93-3	2-Butanone	5.0	U
156-59-2	cis-1,2-Dichloroethene	210	E
67-66-3	Chloroform	1.0	U
71-55-6	1,1,1-Trichloroethane	1.0	U
56-23-5	Carbon tetrachloride	1.0	U
107-06-2	1,2-Dichloroethane	1.0	U
71-43-2	Benzene	1.0	U
79-01-6	Trichloroethene	43	
78-87-5	1,2-Dichloropropane	1.0	U
75-27-4	Bromodichloromethane	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U
127-18-4	Tetrachloroethene	490	E
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	1.0	U
106-93-4	1,2-Dibromoethane	1.0	U
108-90-7	Chlorobenzene	1.0	U
100-41-4	Ethylbenzene	1.0	U
1330-20-7	Xylene (Total)	1.0	U

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

INFLUENT

Lab Name: EUROFINS SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: ESAI-RI Case No.: R0032 Mod. Ref No.: SDG No.: SR0032

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: R0032-01C

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V5Q6614.D

Level: (TRACE/LOW/MED) LOW Date Received: 01/15/2016

% Moisture: not dec. Date Analyzed: 01/15/2016

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
100-42-5	Styrene	1.0	U
75-25-2	Bromoform	1.0	U
98-82-8	Isopropylbenzene	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U
110-82-7	Cyclohexane	1.0	U
79-20-9	Methyl acetate	1.0	U
108-87-2	Methylcyclohexane	1.0	U

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

INFLUENTDL

Lab Name: EUROFINS SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: ESAI-RI Case No.: R0032 Mod. Ref No.: SDG No.: SR0032

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: R0032-01CDL

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V5Q6617.D

Level: (TRACE/LOW/MED) LOW Date Received: 01/15/2016

% Moisture: not dec. Date Analyzed: 01/15/2016

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 4.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	4.0	U
74-87-3	Chloromethane	4.0	U
75-01-4	Vinyl chloride	9.5	D
74-83-9	Bromomethane	4.0	U
75-00-3	Chloroethane	4.0	U
75-69-4	Trichlorofluoromethane	4.0	U
75-35-4	1,1-Dichloroethene	4.0	U
67-64-1	Acetone	20	U
75-15-0	Carbon disulfide	4.0	U
75-09-2	Methylene chloride	4.0	U
156-60-5	trans-1,2-Dichloroethene	4.0	U
1634-04-4	Methyl tert-butyl ether	4.1	D
75-34-3	1,1-Dichloroethane	4.0	U
78-93-3	2-Butanone	20	U
156-59-2	cis-1,2-Dichloroethene	200	D
67-66-3	Chloroform	4.0	U
71-55-6	1,1,1-Trichloroethane	4.0	U
56-23-5	Carbon tetrachloride	4.0	U
107-06-2	1,2-Dichloroethane	4.0	U
71-43-2	Benzene	4.0	U
79-01-6	Trichloroethene	40	D
78-87-5	1,2-Dichloropropane	4.0	U
75-27-4	Bromodichloromethane	4.0	U
10061-01-5	cis-1,3-Dichloropropene	4.0	U
108-10-1	4-Methyl-2-pentanone	20	U
108-88-3	Toluene	4.0	U
10061-02-6	trans-1,3-Dichloropropene	4.0	U
79-00-5	1,1,2-Trichloroethane	4.0	U
127-18-4	Tetrachloroethene	480	D
591-78-6	2-Hexanone	20	U
124-48-1	Dibromochloromethane	4.0	U
106-93-4	1,2-Dibromoethane	4.0	U
108-90-7	Chlorobenzene	4.0	U
100-41-4	Ethylbenzene	4.0	U
1330-20-7	Xylene (Total)	4.0	U

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

INFLUENTDL

Lab Name: EUROFINS SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: ESAI-RI Case No.: R0032 Mod. Ref No.: SDG No.: SR0032

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: R0032-01CDL

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V5Q6617.D

Level: (TRACE/LOW/MED) LOW Date Received: 01/15/2016

% Moisture: not dec. Date Analyzed: 01/15/2016

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 4.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
100-42-5	Styrene	4.0	U
75-25-2	Bromoform	4.0	U
98-82-8	Isopropylbenzene	4.0	U
79-34-5	1,1,2,2-Tetrachloroethane	4.0	U
541-73-1	1,3-Dichlorobenzene	4.0	U
106-46-7	1,4-Dichlorobenzene	4.0	U
95-50-1	1,2-Dichlorobenzene	4.0	U
96-12-8	1,2-Dibromo-3-chloropropane	4.0	U
120-82-1	1,2,4-Trichlorobenzene	4.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	4.0	U
110-82-7	Cyclohexane	4.0	U
79-20-9	Methyl acetate	4.0	U
108-87-2	Methylcyclohexane	4.0	U

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

EFFLUENT

Lab Name: EUROFINS SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: ESAI-RI Case No.: R0032 Mod. Ref No.: SDG No.: SR0032

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: R0032-02C

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V5Q6613.D

Level: (TRACE/LOW/MED) LOW Date Received: 01/15/2016

% Moisture: not dec. Date Analyzed: 01/15/2016

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	1.0	U
74-87-3	Chloromethane	1.0	U
75-01-4	Vinyl chloride	1.0	U
74-83-9	Bromomethane	1.0	U
75-00-3	Chloroethane	1.0	U
75-69-4	Trichlorofluoromethane	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U
67-64-1	Acetone	5.0	U
75-15-0	Carbon disulfide	1.0	U
75-09-2	Methylene chloride	1.0	U
156-60-5	trans-1,2-Dichloroethene	1.0	U
1634-04-4	Methyl tert-butyl ether	2.0	
75-34-3	1,1-Dichloroethane	1.0	U
78-93-3	2-Butanone	5.0	U
156-59-2	cis-1,2-Dichloroethene	23	
67-66-3	Chloroform	1.0	U
71-55-6	1,1,1-Trichloroethane	1.0	U
56-23-5	Carbon tetrachloride	1.0	U
107-06-2	1,2-Dichloroethane	1.0	U
71-43-2	Benzene	1.0	U
79-01-6	Trichloroethene	3.2	
78-87-5	1,2-Dichloropropane	1.0	U
75-27-4	Bromodichloromethane	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U
127-18-4	Tetrachloroethene	27	
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	1.0	U
106-93-4	1,2-Dibromoethane	1.0	U
108-90-7	Chlorobenzene	1.0	U
100-41-4	Ethylbenzene	1.0	U
1330-20-7	Xylene (Total)	1.0	U

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

EFFLUENT

Lab Name: EUROFINS SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: ESAI-RI Case No.: R0032 Mod. Ref No.: SDG No.: SR0032

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: R0032-02C

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V5Q6613.D

Level: (TRACE/LOW/MED) LOW Date Received: 01/15/2016

% Moisture: not dec. Date Analyzed: 01/15/2016

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
100-42-5	Styrene	1.0	U
75-25-2	Bromoform	1.0	U
98-82-8	Isopropylbenzene	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U
110-82-7	Cyclohexane	1.0	U
79-20-9	Methyl acetate	1.0	U
108-87-2	Methylcyclohexane	1.0	U

* Wet Chemistry *

Client: Ecology and Environment Engineering P.C.
Client Sample ID: INFLUENT
Lab ID: R0032-01
Project: Mr. C's Dry Cleaning
Collection Date: 01/13/16 12:00

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SM 2340B -- HARDNESS by Calculation							**SM2340_W**
Hardness, Ca/Mg (As CaCO3)	330		4.0	mg/L CaCO3	1	01/19/2016 11:11	83839
SM 4500 H+ B -- pH VALUE							**SM4500_H+**
pH	7.9		1.0	S.U.	1	01/15/2016 15:20	R92725
The pH value was measured at the temperature of	18			C	1	01/15/2016 15:20	R92725

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

Client: Ecology and Environment Engineering P.C.
Client Sample ID: EFFLUENT
Lab ID: R0032-02
Project: Mr. C's Dry Cleaning
Collection Date: 01/13/16 12:00

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SM 2340B -- HARDNESS by Calculation							**SM2340_W**
Hardness, Ca/Mg (As CaCO3)	330		4.0	mg/L CaCO3	1	01/19/2016 11:14	83839
SM 4500 H+ B -- pH VALUE							**SM4500_H+**
pH	7.4		1.0	S.U.	1	01/15/2016 15:33	R92725
The pH value was measured at the temperature of	18			C	1	01/15/2016 15:33	R92725

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

Last Page of Data Report

Attachment C
Analytical Report from
Spectrum Analytical Laboratories

Analytical Data Package Work Order ID: R0059
Sampled by IEG: January 26, 2016
Received by Lab: January 27, 2016
Date of Final Report: February 3, 2016

eurofins | Spectrum Analytical

☑ Final Report
☐ Re-Issued Report
☐ Revised Report
Report Date:
03-Feb-16 13:30

Laboratory Report

Ecology and Environment Engineering P.C.
368 Pleasant View Drive
Lancaster, NY 14086

Work Order: R0059
Project : Mr. C's Dry Cleaning
Project #: 1703074.0011

Attn: Michael Steffan

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
R0059-01	INFLUENT	Aqueous	26-Jan-16 14:30	27-Jan-16 08:54
R0059-02	EFFLUENT	Aqueous	26-Jan-16 14:30	27-Jan-16 08:54

I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. The results relate only to the samples(s) as received. This report may not be reproduced, except in full, without written approval from Spectrum Analytical.

All applicable NELAC or USEPA CLP requirments have been meet.

Eurofins Spectrum Analytical (ESA-RI) is accredited under the National Environmental Laboratory Approval Program (NELAP) and DoD Environmental Laboratory Accreditation Program (ELAP), holds Organic and Inorganic contracts under the USEPA CLP Program and is certified under several states. The current list of our laboratory approvals and certifications is available on the Certifications page on our web site at www.spectrum-analytical.com.

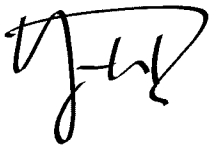
Please contact the Laboratory or Technical Director at 401-732-3400 with any questions regarding the data contained in the laboratory report.

Department of Defense	N/A
Connecticut	PH-0153
Delaware	N/A
Florida	E87664
Massachusetts	M-RI907
New Hampshire	2060
New Jersey	RI001
New York	11522
Rhode Island	LAI00349
USDA	P330-08-00023
USEPA - ISM	EP-W-14-032
USEPA - SOM	EP-W-14-032

NELAP ACCREDITED TNI LABORATORY

LABORATORY ACCREDITATION BUREAU ACCREDITED
Certificate # L2247 Testing

Authorized by:



Yihai Ding
Laboratory Director

Sample Transmittal Documentation

R0059

MITKEM LABORATORIES

A DIVISION OF SPECTRUM ANALYTICAL, INC. Featuring HANIBAL TECHNOLOGY

CHAIN OF CUSTODY RECORD

Page 1 of 1

Special Handling:
TAT- Indicate Date Needed: Std
- All TATs subject to laboratory approval. Min. 24-hour notification needed for rushes.
- Samples disposed of after 30 days unless otherwise instructed.

Report To: E & E, Inc
368 Pleasantview Dr
Lancaster, NY 14086

Telephone: (716) 684-8060
Project Mgr.: Mike Steffan

Invoice To: E & E, Inc

P.O. No.: _____ RQN: _____

Project No.: _____
Site Name: Mr Cs OM & M
Location: East Aurora State: NY
Sampler(s): R. Allen

1=$Na_2S_2O_3$ 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=Ascorbic Acid 7=CH_3OH
8= $NaHSO_4$ 9=_____ 10=_____ 11=_____

List preservative code below: 2

Notes:

DW=Drinking Water GW=Groundwater WW=Wastewater
O=Oil SW= Surface Water SO=Soil SL=Sludge A=Air
X1=_____ X2=_____ X3=_____

R0059 G=Grab C=Composite

Lab Id:	Sample Id:	Date:	Time:	Type	Matrix	Containers: # of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	Analyses: VOCs
01	INFLUENT	Jan 26, 2016	2:30P	G	GW	3				✓
02	EFFLUENT	Jan 26, 2016	2:30P	G	GW	3				✓

QA/QC Reporting Level
☐ Level I ☐ Level II
☐ Level III ☐ Level IV
☒ Other CAT A

State specific reporting standards: _____

Please send another Sample Kit

☒ E-mail to msteffan@ene.com
EDD Format PDF

Condition upon receipt: ☐ Iced ☐ Ambient ☒ °C 4.7°C JK

Relinquished by:	Received by:	Date:	Time:
Richard C Allen Jr	K P	1/27/16	8:54

Page 3 of 28

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

INFLUENT

Lab Name: EUROFINS SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: ESAI-RI Case No.: R0059 Mod. Ref No.: SDG No.: SR0059

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: R0059-01A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V1N8857.D

Level: (TRACE/LOW/MED) LOW Date Received: 01/27/2016

% Moisture: not dec. Date Analyzed: 01/27/2016

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 4.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	4.0	U
74-87-3	Chloromethane	4.0	U
75-01-4	Vinyl chloride	13	
74-83-9	Bromomethane	4.0	U
75-00-3	Chloroethane	4.0	U
75-69-4	Trichlorofluoromethane	4.0	U
75-35-4	1,1-Dichloroethene	4.0	U
67-64-1	Acetone	20	U
75-15-0	Carbon disulfide	4.0	U
75-09-2	Methylene chloride	4.0	U
156-60-5	trans-1,2-Dichloroethene	4.0	U
1634-04-4	Methyl tert-butyl ether	4.0	U
75-34-3	1,1-Dichloroethane	4.0	U
78-93-3	2-Butanone	20	U
156-59-2	cis-1,2-Dichloroethene	210	
67-66-3	Chloroform	4.0	U
71-55-6	1,1,1-Trichloroethane	4.0	U
56-23-5	Carbon tetrachloride	4.0	U
107-06-2	1,2-Dichloroethane	4.0	U
71-43-2	Benzene	4.0	U
79-01-6	Trichloroethene	39	
78-87-5	1,2-Dichloropropane	4.0	U
75-27-4	Bromodichloromethane	4.0	U
10061-01-5	cis-1,3-Dichloropropene	4.0	U
108-10-1	4-Methyl-2-pentanone	20	U
108-88-3	Toluene	4.0	U
10061-02-6	trans-1,3-Dichloropropene	4.0	U
79-00-5	1,1,2-Trichloroethane	4.0	U
127-18-4	Tetrachloroethene	430	
591-78-6	2-Hexanone	20	U
124-48-1	Dibromochloromethane	4.0	U
106-93-4	1,2-Dibromoethane	4.0	U
108-90-7	Chlorobenzene	4.0	U
100-41-4	Ethylbenzene	4.0	U
1330-20-7	Xylene (Total)	4.0	U

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

INFLUENT

Lab Name: EUROFINS SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: ESAI-RI Case No.: R0059 Mod. Ref No.: SDG No.: SR0059

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: R0059-01A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V1N8857.D

Level: (TRACE/LOW/MED) LOW Date Received: 01/27/2016

% Moisture: not dec. Date Analyzed: 01/27/2016

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 4.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
100-42-5	Styrene	4.0	U
75-25-2	Bromoform	4.0	U
98-82-8	Isopropylbenzene	4.0	U
79-34-5	1,1,2,2-Tetrachloroethane	4.0	U
541-73-1	1,3-Dichlorobenzene	4.0	U
106-46-7	1,4-Dichlorobenzene	4.0	U
95-50-1	1,2-Dichlorobenzene	4.0	U
96-12-8	1,2-Dibromo-3-chloropropane	4.0	U
120-82-1	1,2,4-Trichlorobenzene	4.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	4.0	U
110-82-7	Cyclohexane	4.0	U
79-20-9	Methyl acetate	4.0	U
108-87-2	Methylcyclohexane	4.0	U

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

EFFLUENT

Lab Name: EUROFINS SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: ESAI-RI Case No.: R0059 Mod. Ref No.: SDG No.: SR0059

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: R0059-02A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V1N8856.D

Level: (TRACE/LOW/MED) LOW Date Received: 01/27/2016

% Moisture: not dec. Date Analyzed: 01/27/2016

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	1.0	U
74-87-3	Chloromethane	1.0	U
75-01-4	Vinyl chloride	1.0	U
74-83-9	Bromomethane	1.0	U
75-00-3	Chloroethane	1.0	U
75-69-4	Trichlorofluoromethane	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U
67-64-1	Acetone	5.0	U
75-15-0	Carbon disulfide	1.0	U
75-09-2	Methylene chloride	1.0	U
156-60-5	trans-1,2-Dichloroethene	1.0	U
1634-04-4	Methyl tert-butyl ether	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U
78-93-3	2-Butanone	5.0	U
156-59-2	cis-1,2-Dichloroethene	1.0	U
67-66-3	Chloroform	1.0	U
71-55-6	1,1,1-Trichloroethane	1.0	U
56-23-5	Carbon tetrachloride	1.0	U
107-06-2	1,2-Dichloroethane	1.0	U
71-43-2	Benzene	1.0	U
79-01-6	Trichloroethene	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U
75-27-4	Bromodichloromethane	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U
127-18-4	Tetrachloroethene	1.0	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	1.0	U
106-93-4	1,2-Dibromoethane	1.0	U
108-90-7	Chlorobenzene	1.0	U
100-41-4	Ethylbenzene	1.0	U
1330-20-7	Xylene (Total)	1.0	U

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

EFFLUENT

Lab Name: EUROFINS SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: ESAI-RI Case No.: R0059 Mod. Ref No.: SDG No.: SR0059

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: R0059-02A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V1N8856.D

Level: (TRACE/LOW/MED) LOW Date Received: 01/27/2016

% Moisture: not dec. Date Analyzed: 01/27/2016

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
100-42-5	Styrene	1.0	U
75-25-2	Bromoform	1.0	U
98-82-8	Isopropylbenzene	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U
110-82-7	Cyclohexane	1.0	U
79-20-9	Methyl acetate	1.0	U
108-87-2	Methylcyclohexane	1.0	U

Last Page of Data Report

Attachment D
Summary of Site Utility Costs and Projections
January to December 2016

Mr. C's Dry Cleaners Site - Remedial Treatment Utility Costs

ATTACHMENT D

NYSDEC Work Assignment #10C3074.0010.07

12 Months of System Operation and Maintenance

January 2016 Report

Utility Budget:

Electric:	$25,300.00
Telephone:	$540.00
Gas	$1,120.00
Total:	$26,960.00

Gas, Telephone, and Electric

Utility Provider	Account #	E&E Cost Center	Description	Jan-2016	Feb-2016	Mar-2016	Apr-2016	May-2016	Jun-2016			
New York State E&G	1001-0310-422	EN-003229-0001-03TTO	Mr. C's Electric Costs	$ 577.59								
New York State E&G	76-311-11-015900-18											
National Fuel Gas	5819628-05	EN-003229-0001-03TTO	Mr. C's Natural Gas Costs	$ 68.33								
			Totals	$ 645.92	$ -	$ -	$ -	$ -	$ -			
				Jul-2016	Aug-2016	Sep-2016	Oct-2016	Nov-2016	Dec-2016			Ave. /Month
			Mr. C's Electric Costs									$ 577.59
			Mr. C's Natural Gas Costs									$ 68.33
			Totals	$0.00	$ -	$ -	$ -	$ -	$ -			$ 645.92
			Electric - Mr. C's		$577.59		Notes:					
			Natural Gas - Mr. C's		$ 68.33			Overbilled natural gas costs - no charges				
		Grand Total - NYSE&G/National Fuel Gas Costs To Date		$ 645.92				Estimated Reading		$ 333.44	in red -adjusted billing	

Phone

Utility Provider	Phone #	E&E Cost Center	Location Description	Jan-2016	Feb-2016	Mar-2016	Apr-2016	May-2016	Jun-2016			
Verizon	716-652-0094	EN-003229-0001-03TTO	Mr. C's Telephone Costs									
Account #												
716 652 0094 416 26 2												
				Jul-2016	Aug-2016	Sep-2016	Oct-2016	Nov-2016	Dec-2016			Ave./Month
		EN-003229-0001-03TTO										$ -
		Verizon Costs to Date - Mr. C's		$ -								
		Grand Total All Utilities To Date		$ 645.92								

Mr. C's Dry Cleaners Site - Remedial Treatment Utility Costs

ATTACHMENT D

NYSDEC Work Assignment #11

12 Months of System Operation and Maintenance

January 2016 Report

Budget Remaining:

Electric:	**$24,722.41**
Telephone:	**$540.00**
Gas	**$1,051.67**
Total:	**$26,314.08**

	Optimum Operating Hours	Actual Operating Hours	Up-time Percentage	Capacity	Comments:
January-15	672	672	100.00%	9.7%	Very mild winter - very little snow.
February-15			#DIV/0!		
March-15			#DIV/0!		
April-15			#DIV/0!		
May-15			#DIV/0!		
June-15			#DIV/0!		
July-15			#DIV/0!		
August-15			#DIV/0!		
September-15			#DIV/0!		
October-15			#DIV/0!		
November-15			#DIV/0!		
December-15			#DIV/0!		
Totals to Date	**672**	**672**	**100.00%**		

* Percent Capacity is based on initial operating groundwater flows from the eight installed pumps from 9/02. Evaluated on total gallons discharged for monthly operating time.

Maximum pump discharges calculated as an average of 78 gpm as the total for all 8 pumps at the site if all pumps operate 100%. With the exception of groundwater pump RW-1, all others run on a batch basis.

Monthly Average Costs

Mr. C's Electric	**$ 577.59**			
Agway Electric	**$ -**			
Mr. C's Gas	**$ 68.33**			
Mr. C's Telephone	**$ -**			
Ave. Utility Cost Total	**$ 645.92**	**times**	**12 Month Estimate**	**$8,396.96**

ecology and environment engineering, p.c.
International Specialists in the Environment
BUFFALO CORPORATE CENTER
368 Pleasant View Drive
Lancaster, New York 14086
Tel: (716) 684-8060, Fax: (716) 684-0844

March 11, 2016

Mr. William Welling, Project Manager
New York State Department of Environmental Conservation
Division of Environmental Remediation
625 Broadway, 12th Floor
Albany, New York 12233 - 7013

Re: Mr. C's Dry Cleaners Site, Contract # D007617, Site # 915157
February 2016 Operations, Maintenance, and Monitoring Report

Dear Mr. Welling:

Ecology and Environment Engineering, P.C. (EEEPC) is pleased to provide the February 2016 Operations, Maintenance, and Monitoring (OM&M) Report for the Mr. C's Dry Cleaners Site, NYSDEC Site # 915157, located in the Village of East Aurora, New York. A copy of the bi-monthly inspection report prepared by EEEPC's subcontractor, Iyer Environmental Group, PLLC (IEG), is provided in Attachment A. Piezometer water level measurements are provided in Attachment B. The site utility information is provided in Attachment C.

Per your request the Mr. C's treatment system was shutdown beginning February 4, 2016, for three months to evaluate the possible rebound of contaminants in groundwater. No influent /effluent sampling was performed during this time as a result of the treatment system shutdown. Monthly depth to water measurements were taken at the area groundwater monitoring wells, piezometers, and pumping wells during this shutdown period. Another round of groundwater sampling will be performed at the end of the three month shutdown period to evaluate the potential for rebound of the volatile organic compounds around the Mr. C's site.

In review of the on-site treatment system operations, monitoring and maintenance for February 2016, EEEPC offers the following comments and highlights:

Operational Summary

Mr. C's Site – Remedial Operations and Maintenance Information

- The monthly checklist for system inspections from IEG is provided as Attachment A for 2/1/16.
- Piezometer water level readings are provided for 2/2/16, 2/8/16, and 2/23/16, and provided in Attachment B.
- On 2/4/16, the treatment system was shut down. Redox drums, Jesco pumps, and the air stripper sump box and trays were cleaned. Bag filters were changed.
- SVE systems at the treatment room and 586 Main St. building were drained.
- Damage to PZ-4B was encountered and the Town of East Aurora was notified.

Subslab Depressurization Systems (SSDS) – First Presbyterian Church and 27 Whaley Ave. sites and Other Locations

- SSDS Unit manometer in the Mr. C's Treatment Bldg. (586 Main Street) maintained a subslab pressure ranging from -1.7 to -1.8 inches of water column over the reporting month of February 2016.
- Property owners at 27 Whaley Ave. have not returned our calls for inspection of the SSDS unit. EEEPC will continue to contact to obtain access for inspection.
- The basement SSDS unit of the 591 Main Street location has been installed and is operational. The second SSDS unit installation on the first floor was installed and operational in January 2016. Final Engineering Report is being prepared and will be issued in March 2016.
- Final construction reports for five of seven individual locations where SSDS units were installed were issued in February and March 2016.
  - 572-576 Main Street – Intrepid Automotive Property
  - 578-580 Main Street – Mark Jawrowski Property
  - 586 Main Street, Suite 4 – Intrepid Automotive Property, Tenant - Country Cupboard
  - 594 Main Street – Mark Jawrowski property – tenant - Aurora Outfitters
  - 16 Paine Avenue – Boy's and Girl's Club
- The remaining two of seven final construction reports will be issued in March 2016 – Mr. C's Treatment building and 591 Main Street.
- Problems being encountered with moisture and freeze up in the fan system at the County Cupboard SSDS unit. The SSDS is under review by GES and EEEPC. Issue to be resolved in March '16.
- Discussing new installations of SSDS unit at 23 Paine and 31 Paine Ave. EEEPC needs letter of determination of SSDS from NYSDOH to the property owner.

Status of Bioremediation Direct Push Injection Work

- Additional review of the recommendations in the summary report to be evaluated with the Remedial Site Optimization (RSO) program.
- The draft RSO was issued to NYSDEC on December 8, 2015.

Soil Vapor Intrusion Investigation Program ('15-'16)

- The Phase 3 SVII Report was issued to NYSDEC / NYSDOH on August 11, 2015.
- Discuss new property locations with NYSDEC / NYSDOH for SVII work in '15-'16.

Site Management Plan

- EEEPC submitted the updated/revised SMP to NYSDEC and NYSDEC Region 9 on March 2, 2015.
- This is an active site document, so future revisions will be performed once major changes to the management of the site are required after optimization evaluation is performed.

Annual Long-term Groundwater Monitoring Well Report

- The 2015 Annual Long-term Groundwater Monitoring Well field work was completed in October 2015.
- Report of 2015 annual Groundwater results was issued to NYSDEC on December 21, 2015.
- Another round of groundwater samples to be taken prior to treatment system restart. Anticipated start date of groundwater sampling is April 25, 2016.

Periodic Review Report (PRR)

- The 2015 Periodic Review Report was issued to NYSDEC on January 29, 2015.

If you have questions regarding the February 2016 OM&M report summary, please do not hesitate to contact me at 716-684-8060.

Very Truly Yours,
Ecology and Environment Engineering, P. C.

Michael G. Steffan
Project Manager

cc: D. Szymanski, Region 9, NYSDEC - Buffalo w/ attachments
D. Iyer, IEG – w/attachments
CTF- 10C3074.0011.07

Table 1
Mr. C's Dry Cleaners Site Remediation
Site #915157
System Operation and Management

Month	Up-time		Treated Effluent (gallon)	VOC Removal		
	Reporting Hours	Operational Up-time		Influent VOCs (µg/L)	Effluent VOCs(µg/L)	VOCs Removed (lbs.)
(Up-time from 9/5/02 to 01/04/16)	**111,949.50**	**95.23%**	**128,814,819**	**NA**	**NA**	**1,614.16**
January 4, 2016 - February 1, 2016	672	100.00%	305,578	692.0	0.0	1.76
February 1, 2016 - February 29, 2016	0	0.00%	0	0.0	0.0	0.00

Total in 2016	**672.00**	**1.00**	**305,578**	**692.00**	**0.00**	**1.76**
Total from startup	**112,621.50**	**0.95**	**129,120,397.00**	**NA**	**NA**	**1,615.93**

NOTES:

1. Up-time based as percentage of total reporting hours.
2. Treatment system operated by the Tyree Organization Ltd. from 9/02 - 9/03.
3. Treatment system operated by O&M Enterprises Inc. from 10/03 - 7/07.
4. Treatment system operated by Iyer Environmental Group from 7/07 to present.
5. VOC removal calculations are based on monthly water samples and assumes samples are representative of the entire reporting period.
6. VOC removal calculations assume that non-detect values = 0 ug/L.
7. Total VOCs summations include estimated "J" values.
8. VOC removal calculations are based on effluent totalizer readings.
9. "Influent VOCs" and "Effluent VOCs" values given above is the summation of values for individual compounds given in monthly analytical reports.
10. Unit conversion: 1 pound = 453.5924 grams, 1 gallon = 3.785 liters
11. Formula for the VOC removal calculation:

$(VOCs_{Influent} - VOCs_{Effluent})(ug/L) \cdot (1g/10^6 ug) \cdot (1\ lb/453.5924\ g) \cdot (Monthly\ process\ water)(gal) \cdot (3.785\ L/gallon)$

12. Using the 2/2/16 analytical results.

Table 2
Mr. C's Dry Cleaners Site Remediation
Site #915157
Effluent Discharge Criteria & Analytical Compliance Results

Parameter/Analyte	Daily Maximum[1]	Units	February - Effluent Analytical Values - Compliance
Flow (Average)	N/A	gpd	No Sampling Performed
pH	6.0 - 9.0	standard units	
1,1 Dichloroethene	10	µg/L	
1,1 Dichloroethane	10	µg/L	
cis-1,2-dichloroethene	10	µg/L	
Trichloroethene	10	µg/L	
Tetrachloroethene	10	µg/L	
Vinyl Chloride	10	µg/L	
Benzene	5	µg/L	
Ethylbenzene	5	µg/L	
Methylene Chloride	10	µg/L	
1,1,1 Trichloroethane	10	µg/L	
Toluene	5	µg/L	
Methyl-t-Butyl Ether (MTBE)	NA	ug/L	
o-Xylene[2]	5	µg/L	
m, p-Xylene[2]	10	µg/L	
Total Xylenes	NA	ug/L	
Iron, total	600	µg/L	No Sampling Performed
Aluminum	4,000	µg/L	
Copper	48	µg/L	
Lead	11	µg/L	
Manganese	2,000	µg/L	
Silver	100	µg/L	
Vanadium	28	µg/L	
Zinc	230	µg/L	
Total Dissolved Solids	850	mg/L	
Total Suspended Solids	20	mg/L	
Hardness	N/A	mg/L	
Cyanide, Free	10	µg/L	

NOTES:

1. "Daily Maximum" excerpted from Attachment E of Addendum 1 to the Construction Contract Documents dated October 2000.
2. Analytical report did not differentiate between o-Xylene and m, p-Xylene. Total Xylene value reported is given in each line.
3. Shaded cells indicate that analytical value exceeds the "Daily Maximum."
4. "ND" indicates that the compound was not detected and lists the practical quantitation limit in parentheses.
5. "NA" indicates that analyses were not performed and data is unavailable.
6. Average flows based on effluent readings: **No treatment system operations in February 2016.**
7. "J" indicates an estimated value below the detection limit.
8. "B" indicates analyte found in the associated blank.
9. Removed from the required analysis list by NYSDEC Region 9 in February 2005.
10. "NS" indicates that the parameter analysis was not sampled.

40 **Indicates non-compliance with the NYSDEC effluent discharge requirements**
NR **Indicates Not Reported by Lab**

Table 3-1
Mr. C's Dry Cleaners Site Remediation
NYSDEC Site #915157
February 2016 VOC Analytical Summary

Compound	Based on the 1/13/16 Effluent Analytical Results		
	Influent Concentration* (ug/L)	Effluent Concentration** (ug/L)	Cleanup Efficiency*** (%)
Acetone	NO Sampling Performed in February '16		
Benzene			
2-Butanone			
cis-1, 2-Dichloroethene			
Chloroform			
Chloromethane			
Methylene chloride			
Methyl tert-butyl ether (MTBE)			
Methyl acetate			
Tetrachloroethene (PCE)			
Toluene			
Trichloroethene (TCE)			
Carbon Disulfide			
1,1,2 Trichloro-1,2,2-trifluororethane			
2-Hexanone			
4-Methyl-2-pentanone			
Cyclohexane			
trans-1,2-dichloroethene			
Chlorobenzene			
Methylcyclohexane			
Ethylbenzene			
Methyl acetate			
Vinyl Chloride			
Total Xylenes			
• The 1st progress monitoring sampling of the groundwater wells associated with the "pilot" bioaugmentation program was performed on July 1-2, 2013.	**0.0**	**0.00**	

Notes:
1. "NA" = Not applicable
2. "U" = Compound analyzed, but was not detected. Detection limit in parentheses.
3. "DJ" or "J" indicates an estimated value below the practical quantitation limit but above the method detection limit.
4. Non-detect values are assumed to be equal to zero for calculation of monthly average concentrations.
5. "D" indicates the compound concentration was obtained form a secondary dilution analysis.
6. Acetone was not detected in the influent sample above the MDL but detected in the effluent sample. It is not a contaminant of concern for the Mr. C's site.

* Detection Limits (<10) and (<50)
** Detection Limits (<1) and (<5)
*** Contaminants of Concern only

Attachment A
IEG Weekly Inspection Report
February 1, 2016

MR. C's DRY CLEANERS SITE
NYSDEC Site #9-15-157
OM&M: SITE INSPECTION FORM

DATE: 1-Feb-16 ACTIVITIES: Site Inspection

INSPECTION PERSONNEL: R. Allen OTHER PERSONNEL:

WEATHER CONDITIONS: Partly cloudy, cool OUTSIDE TEMPERATURE (° F): 39

ARE WELL PUMPS OPERATING IN AUTO: YES: NO: √ If "NO", provide explanation below

PW-7 is OFF due to injection operation.

PROVIDE WATER LEVEL READINGS ON CONTROL PANEL

RW-1	ON:		OFF: √	3 ft	PW-5	ON:		OFF: √	5 ft
PW-2	ON:		OFF: √	4 ft	PW-6	ON:		OFF: √	4 ft
PW-3	ON:		OFF: √	3 ft	PW-7	ON: √		OFF:	12 ft
PW-4	ON: √		OFF:	7 ft	PW-8	ON:		OFF: √	7 ft

EQUALIZATION TANK: 3 ft Last Alarm D/T/Condition: 2/1/2016 PW-2 Overload

NOTES:

INFLUENT FLOW RATE: 2 gpm INFLUENT TOTALIZER READING 11,911,400 gallons

SEQUESTERING AGENT DRUM LEVEL: 16 inches (x 1.7=) AMOUNT OF AGENT REMAINING: 27 gallons

SEQUESTERING AGENT FEED RATE: ml/min METERING PUMP PRESSURE: 4.0 psi

BAG FILTER PRESSURES:		Top	Bottom			Top	Bottom	
	LEFT:	0	0	psi	RIGHT:	8	0	psi

INFLUENT FEED PUMP IN USE: #1 √ #2 INFLUENT PUMP PRESSURE: 6 psi

AIR STRIPPER BLOWER IN USE: #1 √ #2 AIR STRIPPER PRESSURE: 29.0 in. H_2O

AIR STRIPPER DIFFERENTIAL PRESSURE: broken in. H_2O DISCHARGE PRESSURE: 1.80 in. H_2O

AIR FLOW : 1300 fpm X 1.4 = 1820 CFM

EFFLUENT PUMP IN USE: #1 #2 √ EFFLUENT FEED PUMP PRESSURE: 10 psi

EFFLUENT FLOW RATE: 136 gpm EFFLUENT TOTALIZER READING: 80,796,156 | 407930 gallons

ARE BUILDING HEATERS IN USE? YES: √ NO: INSIDE TEMPERATURE (° F): 65

IS SUMP PUMP IN USE: YES: √ NO: ARE ANY LEAKS PRESENT? YES: NO: √

WATER LEVEL IN SUMP: 7.0 in. TREATMENT BUILDING CLEAN & ORGANIZED? YES: √ NO:

MR. C's DRY CLEANERS SITE
NYSDEC Site #90150157
SITE INSPECTION FORM

1-Feb-16

SAMPLES COLLECTED? YES: _____ NO: √

	Sample ID	Time of Sampling	pH	Turbidity	Temp.	Sp. Cond.
AIR STRIPPER INFLUENT:						
AIR STRIPPER EFFLUENT:						

IS THERE EVIDENCE OF TAMPERING/VANDALISM OF WELLS: ? YES: _____ NO: √

WERE MANHOLES INSPECTED? YES: √ NO: _____

WERE ELECTRICAL BOXES INSPECTED? YES: √ NO: _____

IS WATER PRESENT IN ANY MANHOLES OR ELECTRICAL BOXES? YES: √ NO: _____

If yes, provide manhole/electric box ID and description of any corrective measures below:

PZ-1B has surface concrete damage from winter conditions. PZ-4B, PZ-6A and PZ-6C have been damaged by Town of Aurora. PZ-4B has been improperly repaired by the Town of Aurora.

SUBSLAB SYSTEM

MANOMETER: 1.8 **in. WC** (Fan Inlet)

	west	east
FLOW (fpm):		
FLOW (cfm):		
VACUUM GAUGE (in WC)		

NOTES: cfm = 0.05 x fpm (3" PVC)

INCLUDE REMARKS & DESCRIBE ANY OTHER SYSTEM MAINTENANCE PERFORMED ON MR. C's SITE

Remarks: M. Steffan - 586 Building SVE Fan: put "T" pipe over exhaust. Inspect horizontal pipe for direction of slope.

Other Actions: Swept spruce needles and cones off of the Librarty Parking Lot around well groups PW-6 and PW-7.

Shoveled snow off of MWs and Piezometers.

586 Building SVE Fan: installed "T" fitting on top of exhaust pipe.

Unit #4 - inspected horizontal length of SVE pipe above the ceiling panels. Pronounced 11/2' slope from Utility Room down to elbow at outside wall below fan.

AGWAY

Remarks: Site is empty of materials and has been graded and graveled.

Other Actions:

Mr. C's CLEANERS OM&M

SUMMARY OF FIELD ACTIVITIES BY IEG - 2/2016

DATE	ACTIVITY
1-Feb	OM&M Weekly Inspection. Swept spruce needles off of Library Parking Lot.
2-Feb	Piezometer Readings
3-Feb	End of month summaries. Stopped at Town of Aurora office to inform them of damage to PZ-4B. Remove some equipment from Treatment Room before the system shut down.
4-Feb	Shut down Treatment System. Rinse empty Redux drums. Rinse out Jesco Pump with clean water. Change Bag Filters. Pump down water in Air Stripper sump box. Clean Air Stripper sump box.
5-Feb	Clean Air Stripper sump box. Clean Air Stripper trays with steel brushes.
8-Feb	Piezometer Readings
12-Feb	Shovel snow in front of Treatment Room. Inspect Treatment Room.
22-Feb	Drain Treatment Room SVE system. Drain 586 Building SVE system. Shovel snow off of Piezometers.
23-Feb	Piezometer Readings

Mr. C's CLEANERS OM&M
STATUS OF FIELD ACTIVITIES BY IEG - 2/2016

ACTIVITY	DESCRIPTION	COMPLETION DATE/STATUS
PW-4 UE Level	Asphalt around Underground Enclosure has sunk, leaving it vulnerable to damage. Bring parking lot up to level with asphalt patch.	in progress
Rebuild JAC Pump as needed	Jesco America Corp recommends rebuilding the Redux pump when needed. Purchased rebuild kit.	in progress
Brace Effluent Pipe	David Szymanski (NYSDEC) inspected Treatment Room and said that the effluent pipe should be braced in (3) places to the north wall.	in progress
Inspect and clean Manholes	Inspect manholes near operating pumps. Pump out water in manholes and clean out remaining sediment and other material.	in progress
Trim Broken Piezometers	Many of the piezometers are broken. Measuring water levels is not precise when a pipe is broken. Identify and trim all broken piezometers.	in progress
Cool Treatment Room	Temperature in Treatment Room is well above 90 degrees during the summer months. Need to increase outside air inflow to the room.	in progress
Filter Housings are corroded	Flanges that seal filter baskets inside Rosedale Filter Housings are corroded. Sediment flows around filters instead of being trapped. Replace seals in existing housings (short term). Replace housings (long term).	in progress
Replace Air Stripper Latches	Around (6) latches on the Air Stripper trays are loose or broken. Reattach keepers with JB Weld. Replace broken latches and springs with new parts.	in progress
Repair Leaking Ball Valve	Influent ball valve near east side of EQ Tank drips. Inspect/clean and replace if necessary.	in progress
PZ-1B has damage	PZ-2B has surface concrete damage from severe winter conditions this year. Repair chipped concrete with epoxy material.	in progress
Redux usage rapidly increased	The rate of Redux usage increased rapidly during the past several months despite turning the Jesco Pump settings to their lowest levels. Clean pump and test. Adjust clamps on Redux line. Replace pump if necessary.	in progress
Reduce Influent Pump Rate	Lab Tests have shown high levels of VOCs. Try lengthening the time that the Influent Pump runs to increase the Air Sparging time inside the Air Stripper	in progress
Add Air Sparging System	Lab Tests have shown high levels of VOCs. Try adding an Air Sparging system to the sump box of the Air Stripper to increase the treatment of the effluent.	in progress
South Wall should be sealed	South Wall of Treatment Room has leaked into the neighboring unit several times when there have been water related problems. Trim wall insullation matting to reduce moisture retension. Seal base of wall with silicone caulking.	in progress
PW-8 Maintenance	Pull up transducer, pump and vertical pipe. Clean, inspect and reinstall.	Sep-15
PW-6 does not run	Replace transducer and well pump with more powerful model. Cleaned vertical pipe and Underground Enclosure. Replaced corroded connectors in UE.	Sep-15
PW-2 Maintenance	Pull up transducer, pump and vertical pipe. Clean, inspect and reinstall.	Sep-15
PW-3 does not run	Cleaned vertical pipe, transducer and Underground Enclosure. Replaced corroded connectors in UE. Replaced with new pump.	Oct-15
Church Fan Complaint	West SVE fan is not working. Inspect and clean connections inside unit. If fan continues to go off, replace unit. Replaced unit.	Dec-15
Blower Pipe pulled apart	The Blower Pipe between Blower #1 and Blower #2 pulled apart at the fitting. Readjust pipe and secure with flashing, straps and duct tape.	Dec-16
SVE Fan pipe collects water	The SVE Fan pipe on Building 586 collects water. There is a plug just below the fan to drain water out of the horizontal section of the pipe. Inspect system and make corrections to prevent the pipe from filling with water.	in progress
PW-2 Well Pump not operating	Inspect well pump and find that it shorted out. Replace well pump with new unit.	Dec-15
Shut Down Treatment System	Shut down system for evaluation of ground water gradient.	Feb-16
Repair PZ-4B	Inner ring of piezometer was severely damaged by Town of Aurora snowplow truck. Talked to Town personnel. Related that they would address problem in the spring. Inner ring must be replaced.	in progress

Mr. C's CLEANERS OM&M

SUMMARY OF WATER PUMP MAINTENANCE BY IEG - 2016

as of Feb 2016

ID	CLEAN & INSPECT PUMP	REPLACED PUMP	REPAIR PUMP	PITLESS ADAPTER	INNER RING	HORIZONTAL PIPE	CHECK VALVE	CLEAN & INSPECT TRANSDUCER	REPLACE TRANSDUCER	REPLACE ANEROID BELLOWS	PUMP OUT WELL	CLEAN OUT & INSPECT ELECTRICAL BOX	ELECTRICAL BOX REPAIR
RW - 1	Jan 08, May 10, Jan 12, Oct 15	Feb 08, Jan 12	May 10, Nov 08					May 10, Jan 12, Oct 15					
PW - 2	Jun 08, Aug 09, May 10, Apr 13, Sep 15	Jul 08, Apr 13 Dec 15				Sep-15		Nov 11, May 10, Apr 13 Dec 15	Sep 09, Dec 11		Aug-09	Nov-11	Sep-09
PW - 3	Jun 08, Aug 09, May 10, Sep 15	Jul 08, Dec 11, Oct 15		Repair adapter		Sep-15		Aug 09, Nov 11, Oct 15	Dec 11, Sep 15		Aug-09	Nov 11, Sep 15	
PW - 4	Dec 07, May 08, Sep 09, May 10, Jan 12, Oct 15	Dec 07, Jan 12	Sep-13		Aug 13			May 10, Nov 11, Oct 15	Dec 11, Mar 08, Sep 08		Jul 09, Sep 09	Sep 09, Nov 11	Sep-09
PW - 5	Jan 12, May 08, Oct 15	Jul 08, Jan 12						Mar 11, Oct 15	Jan 12, Sep 08			Jan-12	
PW - 6	Jun 08, Jul 09, Jul 12, Nov 12, Aug 15	Jun 08, Jul 09, Aug 12, Nov 12, Sep 15		Replaced Aug 15		Jul 12, Nov 12, Sep 15	Aug 15	Aug 09, Jul 12, Dec 12, Apr 13, Aug 15	Sep 09, Sep 15	Aug 15	Aug-09	Aug 09, Sep 09, Sep 15	Jul 09, Sep 09
PW - 7	Jun 08, Jul 09, May 10, Oct 10, Aug 11, Mar 12, Jul 12, Nov 12, Aug 15	Nov 07, Jul 09, Oct 10, Nov 12		Replaced Aug 15		Jul 12, Nov 12	Aug 15	Oct 10, Aug 11, Mar 12, Jul 12, Dec 12, Aug 15			Aug 09, May 10, Aug 11		
PW - 8	Jun 08, Aug 09, May 10, Aug 11, Jul 12, Dec 12, Aug 15	Jul 08, Sep 09, Aug 11, Dec 12		Replaced Aug 15		Pipe 8/09, Jul 12, Sep 15	Aug 15	May 10, Aug 11, Jul 12, Dec 12, Apr 13, Aug 15		Aug 15	Aug 09, May 10, Aug 11	Apr 13, Aug 15	Apr-13

Mr. C's CLEANERS OM&M

SUMMARY OF WATER PUMP STATUS - 2016

as of Feb 2016

ID	NEEDS CLEANING & INSPECTION	NEEDS NEW PUMP	NEEDS NEW INNER RING	NEEDS P.A. OR PIPE	NEEDS WELL CLEAN-OUT	PITLESS ADAPTER	NEEDS HORIZONTAL LINE PURGE	NEEDS CHECK VALVE INSPECTION	NEEDS TRANSDUCER INSPECTION	NEEDS NEW TRANSDUCER	NEEDS ANEROID BELLOWS	NEEDS U.E. CLEANED	NEEDS U.E. REPAIR
RW-1	NO	NO	PZ-1B		YES				NO	NO	NO	NO	YES - bolts
PW-2	NO	NO	NO		NO				NO		NO	NO	YES - bolts
PW-3	NO	NO	NO						NO		NO	NO	NO
PW-4	NO	NO	PZ-4B						NO		NO	NO	YES - Asphalt patch
PW-5	NO	NO	NO		YES				NO			NO	NO
PW-6	NO	NO	NO				NO		NO	NO	NO	NO	DONE
PW-7	YES	NO	NO		NO		NO		NO	NO		NO	NO
PW-8	NO	NO	NO		NO		NO		NO	NO	NO	NO	NO

Attachment B
Piezometer Water Level Log Sheets

Including:

2/2/2016

2/8/2016

2/23/2016

MR. C's DRY CLEANERS SITE
NYSDEC Site #9-15-157
OM&M: PIEZOMETER WATER LEVEL LOG

Date: 2-Feb-16 **Measurements taken by:** R. Allen

RW-1	17.50 ft	Comments:		PW-5	16.10 ft	Comments:	
PZ-1A	------ ft	Comments:	Auto parked over	PZ-5A	10.53 ft	Comments:	
PZ-1B	10.79 ft	Comments:		PZ-5B	10.61 ft	Comments:	
PZ-1C	12.15 ft	Comments:		PZ-5C	10.20 ft	Comments:	
PZ-1D	12.32 ft	Comments:		PZ-5D	11.00 ft	Comments:	
PW-2	14.50 ft	Comments:		PW-6	15.80 ft	Comments:	
PZ-2A	10.83 ft	Comments:		PZ-6A	11.54 ft	Comments:	
PZ-2B	11.14 ft	Comments:		PZ-6B	11.41 ft	Comments:	
PZ-2C	10.61 ft	Comments:		PZ-6C	11.64 ft	Comments:	
MW-7	11.16 ft	Comments:	Substitute for 2D	PZ-6D	11.38 ft	Comments:	Shown as RW-2 on map
PW-3	------ ft	Comments:	Auto parked over	PW-7	------ ft	Comments:	injection operation
PZ-3A	11.29 ft	Comments:		MPI-6S	------ ft	Comments:	injection operation
PZ-3B	11.37 ft	Comments:		PZ-7B	11.17 ft	Comments:	
PZ-3C	11.91 ft	Comments:		OW-B	11.08 ft	Comments:	
PZ-3D	11.38 ft	Comments:		PZ-7D	------ ft	Comments:	injection operation
PW-4	19.20 ft	Comments:		PW-8	19.80 ft	Comments:	
PZ-4A	10.97 ft	Comments:		PZ-8A	8.11 ft	Comments:	
PZ-4B	10.66 ft	Comments:		PZ-8B	8.03 ft	Comments:	
PZ-4C	------ ft	Comments:	sealed over	PZ-8C	7.69 ft	Comments:	
PZ-4D	10.28 ft	Comments:		PZ-8D	7.92 ft	Comments:	

PUMPS IN OPERATION DURING MEASUREMENTS

RW-1 pump on?	√	Yes	No	PW-5 pump on?	√	Yes	No
PW-2 pump on?	√	Yes	No	PW-6 pump on?	√	Yes	No
PW-3 pump on?	√	Yes	No	PW-7 pump on?		Yes	√ No
PW-4 pump on?	√	Yes	No	PW-8 pump on?	√	Yes	No

MR. C's DRY CLEANERS SITE
NYSDEC Site #9-15-157
OM&M: PIEZOMETER WATER LEVEL LOG

Date: 8-Feb-16 **Measurements taken by:** R. Allen

RW-1	10.80 ft	Comments:	
PZ-1A	10.83 ft	Comments:	
PZ-1B	10.60 ft	Comments:	
PZ-1C	11.75 ft	Comments:	
PZ-1D	11.89 ft	Comments:	
PW-2	10.40 ft	Comments:	
PZ-2A	10.38 ft	Comments:	
PZ-2B	10.73 ft	Comments:	
PZ-2C	10.22 ft	Comments:	
MW-7	10.74 ft	Comments:	Substitute for 2D
PW-3	------ ft	Comments:	Auto parked over
PZ-3A	10.88 ft	Comments:	
PZ-3B	10.96 ft	Comments:	
PZ-3C	11.43 ft	Comments:	
PZ-3D	10.97 ft	Comments:	
PW-4	10.40 ft	Comments:	
PZ-4A	10.82 ft	Comments:	
PZ-4B	10.23 ft	Comments:	Damaged
PZ-4C	------ ft	Comments:	sealed over
PZ-4D	9.87 ft	Comments:	

PW-5	9.80 ft	Comments:	
PZ-5A	10.43 ft	Comments:	
PZ-5B	10.21 ft	Comments:	
PZ-5C	9.82 ft	Comments:	
PZ-5D	10.62 ft	Comments:	
PW-6	11.20 ft	Comments:	
PZ-6A	11.18 ft	Comments:	
PZ-6B	11.02 ft	Comments:	
PZ-6C	11.38 ft	Comments:	
PZ-6D	11.05 ft	Comments:	Shown as RW-2 on map
PW-7	------ ft	Comments:	injection operation
MPI-6S	------ ft	Comments:	injection operation
PZ-7B	10.84 ft	Comments:	
OW-B	10.74 ft	Comments:	
PZ-7D	------ ft	Comments:	injection operation
PW-8	7.00 ft	Comments:	
PZ-8A	7.70 ft	Comments:	
PZ-8B	7.64 ft	Comments:	
PZ-8C	7.38 ft	Comments:	
PZ-8D	7.59 ft	Comments:	

PUMPS IN OPERATION DURING MEASUREMENTS

RW-1 pump on?		Yes	√	No	PW-5 pump on?	Yes	√	No
PW-2 pump on?		Yes	√	No	PW-6 pump on?	Yes	√	No
PW-3 pump on?		Yes	√	No	PW-7 pump on?	Yes	√	No
PW-4 pump on?		Yes	√	No	PW-8 pump on?	Yes	√	No

MR. C's DRY CLEANERS SITE
NYSDEC Site #9-15-157
OM&M: PIEZOMETER WATER LEVEL LOG

Date: 23-Feb-16 **Measurements taken by:** R. Allen

RW-1	10.80 ft	
PZ-1A	10.82 ft	
PZ-1B	10.57 ft	
PZ-1C	------ ft	Auto parked over
PZ-1D	11.85 ft	
PW-2	10.40 ft	
PZ-2A	10.34 ft	
PZ-2B	10.68 ft	
PZ-2C	10.20 ft	
MW-7	------ ft	Substitute for 2D; auto parked
PW-3	10.90 ft	
PZ-3A	10.84 ft	
PZ-3B	10.91 ft	
PZ-3C	------ ft	under snowpile
PZ-3D	------ ft	
PW-4	10.40 ft	
PZ-4A	11.00 ft	
PZ-4B	10.16 ft	
PZ-4C	------ ft	sealed over
PZ-4D	9.84 ft	

PW-5	9.70 ft	
PZ-5A	10.10 ft	
PZ-5B	10.14 ft	
PZ-5C	9.75 ft	
PZ-5D	10.42 ft	
PW-6	11.20 ft	
PZ-6A	11.07 ft	
PZ-6B	10.93 ft	
PZ-6C	11.22 ft	
PZ-6D	10.98 ft	Shown as RW-2 on map
PW-7	10.50 ft	
MPI-6S	------ ft	under snowpile
PZ-7B	10.75 ft	
OW-B	10.65 ft	
PZ-7D	------ ft	under snowpile
PW-8	11.10 ft	
PZ-8A	7.62 ft	
PZ-8B	7.55 ft	
PZ-8C	7.21 ft	
PZ-8D	7.56 ft	

OTHER WELLS

EE-1	ft	MPI-1S	ft	MPI-7IR	ft	ESI-3	10.58 ft
EE-2	11.59 ft	MPI-2SR	ft	MPI-8SR	ft	ESI-6	ft
EE-3	ft	MPI-3S	ft	MPI-9BR	ft	ESI-2R	ft
EE-4	ft	MPI-4S	8.56 ft	MPI-13BR	ft	ESI-5R	ft
MW-7	ft	MPI-4I	10.69 ft	MPI-14BR	ft		
MW-8	10.73 ft	MPI-5S	11.37 ft	MPI-15B	ft		
MW-11	9.29 ft	MPI-6S	ft				

COMMENTS:

Attachment C
Summary of Site Utility Costs and Projections
January to December 2016

Mr. C's Dry Cleaners Site - Remedial Treatment Utility Costs

ATTACHMENT C

NYSDEC Work Assignment #10C3074.0010.07

12 Months of System Operation and Maintenance

February 2016 Report

Gas, Telephone, and Electric

Utility Budget:	
Electric:	$25,300.00
Telephone:	$540.00
Gas	$1,120.00
Total:	$26,960.00

Utility Provider	Account #	E&E Cost Center	Description	Jan-2016	Feb-2016	Mar-2016	Apr-2016	May-2016	Jun-2016			
New York State E&G	1001-0310-422	EN-003229-0001-03TTO	Mr. C's Electric Costs	$ 577.59	$ 762.15							
New York State E&G	76-311-11-015900-18											
National Fuel Gas	5819628-05	EN-003229-0001-03TTO	Mr. C's Natural Gas Costs	$ 68.33	$ 4.15							
			Totals	$ 645.92	$ 766.30	$ -	$ -	$ -	$ -			
				Jul-2016	Aug-2016	Sep-2016	Oct-2016	Nov-2016	Dec-2016			Ave. /Month
			Mr. C's Electric Costs									$ 669.87
			Mr. C's Natural Gas Costs									$ 36.24
			Totals	$0.00	$ -	$ -	$ -	$ -	$ -			$ 706.11
			Electric - Mr. C's		$1,339.74		Notes:					
			Natural Gas - Mr. C's		$ 72.48			Overbilled natural gas costs - no charges				
		Grand Total - NYSE&G/National Fuel Gas Costs To Date			$ 1,412.22			Estimated Reading		$ 333.44	in red -adjusted billing	

Phone

Utility Provider	Phone #	E&E Cost Center	Location Description	Jan-2016	Feb-2016	Mar-2016	Apr-2016	May-2016	Jun-2016			
Verizon	716-652-0094	EN-003229-0001-03TTO	Mr. C's Telephone Costs									
Account #												
716 652 0094 416 26 2												
				Jul-2016	Aug-2016	Sep-2016	Oct-2016	Nov-2016	Dec-2016			Ave./Month
		EN-003229-0001-03TTO										$ -
			Verizon Costs to Date - Mr. C's		$ -							
			Grand Total All Utilities To Date		$ 1,412.22							

Mr. C's Dry Cleaners Site - Remedial Treatment Utility Costs

ATTACHMENT C

NYSDEC Work Assignment #11

12 Months of System Operation and Maintenance

February 2016 Report

Budget Remaining:

Electric:	$23,960.26
Telephone:	$540.00
Gas	$1,047.52
Total:	$25,547.78

	Optimum Operating Hours	Actual Operating Hours	Up-time Percentage	Capacity	Comments:
January-15	672	672	100.00%	9.7%	Very mild winter - very little snow.
February-15	0	0	0.00%	0.0%	System Shutdown
March-15			#DIV/0!		
April-15			#DIV/0!		
May-15			#DIV/0!		
June-15			#DIV/0!		
July-15			#DIV/0!		
August-15			#DIV/0!		
September-15			#DIV/0!		
October-15			#DIV/0!		
November-15			#DIV/0!		
December-15			#DIV/0!		
Totals to Date	**672**	**672**	**100.00%**		

* Percent Capacity is based on initial operating groundwater flows from the eight installed pumps from 9/02. Evaluated on total gallons discharged for monthly operating time.

Maximum pump discharges calculated as an average of 78 gpm as the total for all 8 pumps at the site if all pumps operate 100%. With the exception of groundwater pump RW-1, all others run on a batch basis.

Monthly Average Costs

Mr. C's Electric	$	669.87			
Agway Electric	$	-			
Mr. C's Gas	$	36.24			
Mr. C's Telephone	$	-			
Ave. Utility Cost Total	$	706.11	**times**	**12 Month Estimate**	**$9,179.43**

ecology and environment engineering, p.c.
International Specialists in the Environment
BUFFALO CORPORATE CENTER
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April 7, 2016

Mr. William Welling, Project Manager
New York State Department of Environmental Conservation
Division of Environmental Remediation
625 Broadway, 12th Floor
Albany, New York 12233 - 7013

Re: Mr. C's Dry Cleaners Site, Contract # D007617, Site # 915157
March 2016 Operations, Maintenance, and Monitoring Report

Dear Mr. Welling:

Ecology and Environment Engineering, P.C. (EEEPC) is pleased to provide the March 2016 Operations, Maintenance, and Monitoring (OM&M) Report for the Mr. C's Dry Cleaners Site, NYSDEC Site # 915157, located in the Village of East Aurora, New York. A summary of field activities prepared by EEEPC's subcontractor, Iyer Environmental Group, PLLC (IEG), is provided in Attachment A. Piezometer water level measurements are provided in Attachment B. The site utility information is provided in Attachment C.

Per your request, the Mr. C's treatment system has been shutdown since February 4, 2016 and will continue to be offline for three months to evaluate the possible rebound of contaminants in groundwater. No influent/effluent samples were performed during this time as a result of the treatment system shutdown. Monthly water depth measurements are taken at the site's groundwater monitoring wells, piezometers, and pumping wells during this shutdown period. Groundwater sampling will be performed at the end of the three month shutdown period (May 2016) to evaluate the potential for rebound of the volatile organic compounds around the Mr. C's site.

On March 2, 2016, a broken overhead sewage line in the treatment facility was identified and repaired by subcontractor, Ramsey Renovations (RR), with oversight from IEG and the property owner, Intrepid Automotive. The treatment facility's equipment and tools were cleaned and tanks were disinfected the week of March 6th. Damaged equipment was replaced and the treatment room was inspected on March 15, 2016. Residents were notified that they may resume water and sanitary use.

In review of the on-site treatment system operations, monitoring and maintenance for March 2016, EEEPC offers the following comments and highlights:

Operational Summary

Mr. C's Site – Remedial Operations and Maintenance Information

- The March 2016 summary of field activities from IEG is provided as Attachment A.
- Piezometer water level readings from 3/11/2016 are provided in Attachment B.
- On 3/2/2016 a broken sewage line in the treatment room was repaired by subcontractors. Treatment room equipment was cleaned, disinfected, and replaced where necessary. Treatment room cleanup was completed on 3/9/2016.
- SVE systems at the treatment room were drained.
- Eight (8) piezometers were repaired.

Subslab Depressurization Systems (SSDS)

- Property owners at 27 Whaley Ave. have not returned EEEPC's calls for inspection of the SSDS unit. EEEPC will continue to contact to obtain access for inspection.
- Final engineering reports for all seven individual locations where SSDS units were installed were submitted in February and March 2016 as follows.
    1. 16 Paine Avenue – Boys and Girls Club; Submitted 2/18/2016
    2. 578-580 Main Street – Mark Jawrowski Property; Submitted 2/22/2016
    3. 572-576 Main Street – Intrepid Automotive Property; Submitted 3/2/2016
    4. 586 Main Street, Suite 4 – Intrepid Automotive Property (Tenant: Country Cupboard); Submitted 3/2/2016
    5. 594 Main Street – Mark Jawrowski Property (Tenant: Aurora Outfitters); Submitted 3/2/2016
    6. Mr. C's Treatment Facility; Submitted 3/24/2016
    7. 591 Main Street; Submitted 3/25/2016
- Problems were encountered with moisture and freeze up in the fan system at the 586 Main Street County Cupboard SSDS unit. The SSDS is under review by GES and EEEPC.
- Basement measurements were taken on March 17, 2016 to initiate SSDS installation design at 31 Paine Street.
- Discussion of new SSDS unit installation at 23 Paine Street is in progress. EEEPC needs to re-issue letter of determination of SSDS from NYSDOH to the new property owner as of November 2015.

Status of Bioremediation Direct Push Injection Work

- Additional review of the recommendations in the summary report to be evaluated with the Remedial Site Optimization (RSO) program.
- The draft RSO was issued to NYSDEC on December 8, 2015.

Soil Vapor Intrusion Investigation Program (2015-2016)

- The Phase 3 SVII Report was issued to NYSDEC / NYSDOH on August 11, 2015.
- Discuss new property locations with NYSDEC / NYSDOH for SVII work in 2016.

Site Management Plan

- EEEPC submitted the updated/revised SMP to NYSDEC and NYSDEC Region 9 on March 2, 2015.
- This is an active site document, so future revisions will be performed once major changes to the management of the site are required after optimization evaluation is performed.

Annual Long-term Groundwater Monitoring Well Report

- The 2015 Annual Long-term Groundwater Monitoring Well field work was completed in October 2015.
- Report of 2015 annual Groundwater results was issued to NYSDEC on December 21, 2015.
- Another round of groundwater samples to be taken prior to treatment system restart. Anticipated start date of groundwater sampling is April 25, 2016.

Periodic Review Report (PRR)

- The 2015 Periodic Review Report was issued to NYSDEC on January 29, 2015.

If you have questions regarding the March 2016 OM&M report summary, please do not hesitate to contact me at 716-684-8060.

Very Truly Yours,
Ecology and Environment Engineering, P. C.

Michael G. Steffan
Project Manager

cc: D. Szymanski, Region 9, NYSDEC - Buffalo w/ attachments
D. Iyer, IEG – w/attachments
CTF - 10C3074.0011.07

Table 1
Mr. C's Dry Cleaners Site Remediation
Site #915157
System Operation and Management

Month	Up-time		Treated Effluent (gallon)	VOC Removal		
	Reporting Hours	Operational Up-time		Influent VOCs (µg/L)	Effluent VOCs(µg/L)	VOCs Removed (lbs.)
(Up-time from 9/5/02 to 01/04/16)	**111,949.50**	**95.23%**	**128,814,819**	**NA**	**NA**	**1,614.16**
January 4, 2016 - February 1, 2016	672	100.00%	305,578	692.0	0.0	1.76
February 1, 2016 - February 29, 2016	0	0.00%	0	0.0	0.0	0.00
March 1, 2016 - March 31, 2016	0	0.00%	0	0.0	0.0	0.00

Total in 2016	**672.00**	**1.00**	**305,578**	**692.00**	**0.00**	**1.76**
Total from startup	**112,621.50**	**0.95**	**129,120,397.00**	**NA**	**NA**	**1,615.93**

NOTES:

1. Up-time based as percentage of total reporting hours.
2. Treatment system operated by the Tyree Organization Ltd. from 9/02 - 9/03.
3. Treatment system operated by O&M Enterprises Inc. from 10/03 - 7/07.
4. Treatment system operated by Iyer Environmental Group from 7/07 to present.
5. VOC removal calculations are based on monthly water samples and assumes samples are representative of the entire reporting period.
6. VOC removal calculations assume that non-detect values = 0 ug/L.
7. Total VOCs summations include estimated "J" values.
8. VOC removal calculations are based on effluent totalizer readings.
9. "Influent VOCs" and "Effluent VOCs" values given above is the summation of values for individual compounds given in monthly analytical reports.
10. Unit conversion: 1 pound = 453.5924 grams, 1 gallon = 3.785 liters
11. Formula for the VOC removal calculation:

$(VOCs_{Influent} - VOCs_{Effluent})(ug/L) \cdot (1g/10^6 ug) \cdot (1\ lb/453.5924\ g) \cdot (Monthly\ process\ water)(gal) \cdot (3.785\ L/gallon)$

12. Using the 2/2/16 analytical results.

Table 2
Mr. C's Dry Cleaners Site Remediation
Site #915157
Effluent Discharge Criteria & Analytical Compliance Results

Parameter/Analyte	Daily Maximum[1]	Units	February - Effluent Analytical Values - Compliance
Flow (Average)	N/A	gpd	No Sampling Performed
pH	6.0 - 9.0	standard units	
1,1 Dichloroethene	10	µg/L	
1,1 Dichloroethane	10	µg/L	
cis-1,2-dichloroethene	10	µg/L	
Trichloroethene	10	µg/L	
Tetrachloroethene	10	µg/L	
Vinyl Chloride	10	µg/L	
Benzene	5	µg/L	
Ethylbenzene	5	µg/L	
Methylene Chloride	10	µg/L	
1,1,1 Trichloroethane	10	µg/L	
Toluene	5	µg/L	
Methyl-t-Butyl Ether (MTBE)	NA	ug/L	
o-Xylene[2]	5	µg/L	
m, p-Xylene[2]	10	µg/L	
Total Xylenes	NA	ug/L	
Iron, total	600	µg/L	No Sampling Performed
Aluminum	4,000	µg/L	
Copper	48	µg/L	
Lead	11	µg/L	
Manganese	2,000	µg/L	
Silver	100	µg/L	
Vanadium	28	µg/L	
Zinc	230	µg/L	
Total Dissolved Solids	850	mg/L	
Total Suspended Solids	20	mg/L	
Hardness	N/A	mg/L	
Cyanide, Free	10	µg/L	

NOTES:

1. "Daily Maximum" excerpted from Attachment E of Addendum 1 to the Construction Contract Documents dated October 2000.
2. Analytical report did not differentiate between o-Xylene and m, p-Xylene. Total Xylene value reported is given in each line.
3. Shaded cells indicate that analytical value exceeds the "Daily Maximum."
4. "ND" indicates that the compound was not detected and lists the practical quantitation limit in parentheses.
5. "NA" indicates that analyses were not performed and data is unavailable.
6. Average flows based on effluent readings: **No treatment system operations in March 2016.**
7. "J" indicates an estimated value below the detection limit.
8. "B" indicates analyte found in the associated blank.
9. Removed from the required analysis list by NYSDEC Region 9 in February 2005.
10. "NS" indicates that the parameter analysis was not sampled.

40 **Indicates non-compliance with the NYSDEC effluent discharge requirements**
NR **Indicates Not Reported by Lab**

Table 3-1
Mr. C's Dry Cleaners Site Remediation
NYSDEC Site #915157
March 2016 VOC Analytical Summary

Compound	Based on the _____ Effluent Analytical Results		
	Influent Concentration* (ug/L)	Effluent Concentration** (ug/L)	Cleanup Efficiency*** (%)
Acetone	No Sampling Performed in March 2016		
Benzene			
2-Butanone			
cis-1, 2-Dichloroethene			
Chloroform			
Chloromethane			
Methylene chloride			
Methyl tert-butyl ether (MTBE)			
Methyl acetate			
Tetrachloroethene (PCE)			
Toluene			
Trichloroethene (TCE)			
Carbon Disulfide			
1,1,2 Trichloro-1,2,2-trifluororethane			
2-Hexanone			
4-Methyl-2-pentanone			
Cyclohexane			
trans-1,2-dichloroethene			
Chlorobenzene			
Methylcyclohexane			
Ethylbenzene			
Methyl acetate			
Vinyl Chloride			
Total Xylenes			
• The 1st progress monitoring sampling of the groundwater wells associated with the "pilot" bioaugmentation program was performed on July 1-2, 2013.	**0.0**	**0.00**	

Notes:
1. "NA" = Not applicable
2. "U" = Compound analyzed, but was not detected. Detection limit in parentheses.
3. "DJ" or "J" indicates an estimated value below the practical quantitation limit but above the method detection limit.
4. Non-detect values are assumed to be equal to zero for calculation of monthly average concentrations.
5. "D" indicates the compound concentration was obtained form a secondary dilution analysis.
6. Acetone was not detected in the influent sample above the MDL but detected in the effluent sample. It is not a contaminant of concern for the Mr. C's site.

* Detection Limits (<10) and (<50)
** Detection Limits (<1) and (<5)
*** Contaminants of Concern only

Attachment A
IEG Summary of Field Activities
March, 2016

Mr. C's CLEANERS OM&M

SUMMARY OF FIELD ACTIVITIES BY IEG - 3/2016

DATE	ACTIVITY
2-Mar	OM&M Inspection. Discovered broken sewage line inside Treatment Room. Informed neighbors not to use water. Informed IAE of the problem. Observe Ramsey Renovations repair of pipe.
3-Mar	February end of Month Summaries. Meet with IAE about sewage leak. Called cleaning businesses. Meet with Apex Flood Restoration. Clean tools and equipment.
7-Mar	Mobilize for Treatment Room cleaning. Oversee Ramsey Renovations cleaning of Treatment Room and equipment. Demobilize equipment after RR finishes cleaning. Get supplies.
8-Mar	Get supplies. Spray disinfectant around and under EQ Tank. Organize Treatment Room. Paint IDs on piezometers.
9-Mar	Get supplies. Clean tool cabinet. Organize Treatment Room equipment. Paint IDs on piezometers.
10-Mar	OM&M office work
11-Mar	Piezometer Readings
15-Mar	Inspect Treatment Room. Drain SVE systems.
18-Mar	OM&M office work
22-Mar	Spray disinfectant around EQ Tank. Drain SVE systems.
28-Mar	OM&M office work
29-Mar	Drain SVE system. Repair piezometers: MPI-5S, EE-4, ESI-2R, MPI-4S, MPI-4I, ESI-3, PZ-1C and PZ-3D.

Mr. C's CLEANERS OM&M
STATUS OF FIELD ACTIVITIES BY IEG - 3/2016

ACTIVITY	DESCRIPTION	COMPLETION DATE/STATUS
Shut Down Treatment System	Shut down system for evaluation of ground water gradient.	Feb-16
PW-4 UE Level	Asphalt around Underground Enclosure has sunk, leaving it vulnerable to damage. Bring parking lot up to level with asphalt patch.	in progress
Rebuild JAC Pump as needed	Jesco America Corp recommends rebuilding the Redux pump when needed. Purchased rebuild kit.	in progress
Brace Effluent Pipe	David Szymanski (NYSDEC) inspected Treatment Room and said that the effluent pipe should be braced in (3) places to the north wall.	in progress
Inspect and clean Manholes	Inspect manholes near operating pumps. Pump out water in manholes and clean out remaining sediment and other material.	in progress
Trim Broken Piezometers	Many of the piezometers are broken. Measuring water levels is not precise when a pipe is broken. Identify and trim all broken piezometers.	in progress
Cool Treatment Room	Temperature in Treatment Room is well above 90 degrees during the summer months. Need to increase outside air inflow to the room.	in progress
Filter Housings are corroded	Flanges that seal filter baskets inside Rosedale Filter Housings are corroded. Sediment flows around filters instead of being trapped. Replace seals in existing housings (short term). Replace housings (long term).	in progress
Replace Air Stripper Latches	Around (6) latches on the Air Stripper trays are loose or broken. Reattach keepers with JB Weld. Replace broken latches and springs with new parts.	in progress
Repair Leaking Ball Valve	Influent ball valve east of EQ Tank drips. Inspect/clean & replace if necessary.	in progress
PZ-1B has damage	PZ-2B has surface concrete damage from severe winter conditions this year. Repair chipped concrete with epoxy material.	in progress
Redux usage rapidly increased	The rate of Redux usage increased rapidly during the past several months despite turning the Jesco Pump settings to their lowest levels. Clean pump and test. Adjust clamps on Redux line. Replace pump if necessary.	in progress
Reduce Influent Pump Rate	Lab Tests have shown high levels of VOCs. Try lengthening the time that the Influent Pump runs to increase the Air Sparging time inside the Air Stripper	in progress
Add Air Sparging System	Lab Tests have shown high levels of VOCs. Try adding an Air Sparging system to the sump box of the Air Stripper to increase the treatment of the effluent.	in progress
South Wall should be sealed	South Wall of Treatment Room has leaked into the neighboring unit several times when there have been water related problems. Trim wall insullation matting to reduce moisture retension. Seal base of wall with silicone caulking.	in progress
SVE Fan pipe collects water	The SVE Fan pipe on Building 586 collects water. There is a plug just below the fan to drain water out of the horizontal section of the pipe. Inspect system and make corrections to prevent the pipe from filling with water.	in progress
Repair PZ-4B	Inner ring of piezometer was severely damaged by Town's snowplow truck. Talked to Town - they will address problem in Spring. Inner ring must be replaced.	in progress
Sewer return line came apart	Sewer return line inside Treatment Room came apart resulting in raw sewage being splashed around in half the unit. Oversaw clean up by Ramsey Renovations. Cleaned some equipment and spray disinfectant in inaccessible areas. Replace equipment that was damaged beyond repair/cleaning.	Mar-16
Top cover contacts cap for ESI-2R, ESI-3, MPI-5S, EE-4, PZ-1C, PZ-3D	Movement over time of the riser relative to the inner ring has left the riser cap in contact with the top cover. Trimmed riser to create clearance for the riser cap.	Mar-16
Concrete inside inner ring obstructs cap for MPI-4I & MPI-4S	Movement over time of the concrete base inside the inner ring is causing interference with the riser cap. Removed concrete adjacent to riser.	Mar-16

Mr. C's CLEANERS OM&M

SUMMARY OF WATER PUMP MAINTENANCE BY IEG - 2016

as of Mar 2016

ID	CLEAN & INSPECT PUMP	REPLACED PUMP	REPAIR PUMP	PITLESS ADAPTER	INNER RING	HORIZONTAL PIPE	CHECK VALVE	CLEAN & INSPECT TRANSDUCER	REPLACE TRANSDUCER	REPLACE ANEROID BELLOWS	PUMP OUT WELL	CLEAN OUT & INSPECT ELECTRICAL BOX	ELECTRICAL BOX REPAIR
RW - 1	Jan 08, May 10, Jan 12, Oct 15	Feb 08, Jan 12	May 10, Nov 08					May 10, Jan 12, Oct 15					
PW - 2	Jun 08, Aug 09, May 10, Apr 13, Sep 15	Jul 08, Apr 13 Dec 15				Sep-15		Nov 11, May 10, Apr 13 Dec 15	Sep 09, Dec 11		Aug-09	Nov-11	Sep-09
PW - 3	Jun 08, Aug 09, May 10, Sep 15	Jul 08, Dec 11, Oct 15		Repair adapter		Sep-15		Aug 09, Nov 11, Oct 15	Dec 11, Sep 15		Aug-09	Nov 11, Sep 15	
PW - 4	Dec 07, May 08, Sep 09, May 10, Jan 12, Oct 15	Dec 07, Jan 12	Sep-13		Aug 13			May 10, Nov 11, Oct 15	Dec 11, Mar 08, Sep 08		Jul 09, Sep 09	Sep 09, Nov 11	Sep-09
PW - 5	Jan 12, May 08, Oct 15	Jul 08, Jan 12						Mar 11, Oct 15	Jan 12, Sep 08			Jan-12	
PW - 6	Jun 08, Jul 09, Jul 12, Nov 12, Aug 15	Jun 08, Jul 09, Aug 12, Nov 12, Sep 15		Replaced Aug 15		Jul 12, Nov 12, Sep 15	Aug 15	Aug 09, Jul 12, Dec 12, Apr 13, Aug 15	Sep 09, Sep 15	Aug 15	Aug-09	Aug 09, Sep 09, Sep 15	Jul 09, Sep 09
PW - 7	Jun 08, Jul 09, May 10, Oct 10, Aug 11, Mar 12, Jul 12, Nov 12, Aug 15	Nov 07, Jul 09, Oct 10, Nov 12		Replaced Aug 15		Jul 12, Nov 12	Aug 15	Oct 10, Aug 11, Mar 12, Jul 12, Dec 12, Aug 15			Aug 09, May 10, Aug 11		
PW - 8	Jun 08, Aug 09, May 10, Aug 11, Jul 12, Dec 12, Aug 15	Jul 08, Sep 09, Aug 11, Dec 12		Replaced Aug 15		Pipe 8/09, Jul 12, Sep 15	Aug 15	May 10, Aug 11, Jul 12, Dec 12, Apr 13, Aug 15		Aug 15	Aug 09, May 10, Aug 11	Apr 13, Aug 15	Apr-13

Mr. C's CLEANERS OM&M

SUMMARY OF WATER PUMP STATUS - 2016

as of Mar 2016

ID	NEEDS CLEANING & INSPECTION	NEEDS NEW PUMP	NEEDS NEW INNER RING	NEEDS P.A. OR PIPE	NEEDS WELL CLEAN-OUT	PITLESS ADAPTER	NEEDS HORIZONTAL LINE PURGE	NEEDS CHECK VALVE INSPECTION	NEEDS TRANSDUCER INSPECTION	NEEDS NEW TRANSDUCER	NEEDS ANEROID BELLOWS	NEEDS U.E. CLEANED	NEEDS U.E. REPAIR
RW-1	NO	NO	PZ-1B		YES				NO	NO	NO	NO	YES - bolts
PW-2	NO	NO	NO		NO				NO		NO	NO	YES - bolts
PW-3	NO	NO	NO						NO		NO	NO	NO
PW-4	NO	NO	PZ-4B						NO		NO	NO	YES - Asphalt patch
PW-5	NO	NO	NO		YES				NO			NO	NO
PW-6	NO	NO	NO				NO		NO	NO	NO	NO	DONE
PW-7	YES	NO	NO		NO		NO		NO	NO		NO	NO
PW-8	NO	NO	NO		NO		NO		NO	NO	NO	NO	NO

Attachment B
Piezometer Water Level Log Sheet

Dated:

3/11/2016

MR. C's DRY CLEANERS SITE
NYSDEC Site #9-15-157

OM&M: PIEZOMETER WATER LEVEL LOG

Date: 11-Mar-16 **Measurements taken by:** R. Allen

RW-1	10.40 ft	
PZ-1A	10.46 ft	
PZ-1B	10.18 ft	
PZ-1C	11.36 ft	
PZ-1D	11.48 ft	
PW-2	9.90 ft	
PZ-2A	9.95 ft	
PZ-2B	10.29 ft	
PZ-2C	9.77 ft	
MW-7	10.30 ft	Substitute for 2D
PW-3	10.50 ft	
PZ-3A	10.45 ft	
PZ-3B	10.48 ft	
PZ-3C	11.01 ft	
PZ-3D	10.50 ft	
PW-4	9.80 ft	
PZ-4A	10.31 ft	
PZ-4B	9.76 ft	
PZ-4C	------ ft	Sealed Over
PZ-4D	9.39 ft	

PW-5	9.30 ft	
PZ-5A	9.63 ft	
PZ-5B	9.73 ft	
PZ-5C	9.32 ft	
PZ-5D	10.09 ft	
PW-6	10.50 ft	
PZ-6A	10.66 ft	
PZ-6B	10.51 ft	
PZ-6C	10.78 ft	
PZ-6D	10.52 ft	Shown as RW-2 on Map
PW-7	9.60 ft	
MPI-6S	10.19 ft	
PZ-7B	10.31 ft	
OW-B	10.24 ft	
PZ-7D	+- 10 ft	Product in Well
PW-8	6.30 ft	
PZ-8A	7.18 ft	
PZ-8B	7.11 ft	
PZ-8C	6.78 ft	
PZ-8D	7.20 ft	

OTHER WELLS							
EE-1	? ft	MPI-1S	9.68 ft	MPI-7IR	10.17 ft	ESI-3	10.20 ft
EE-2	10.90 ft	MPI-2SR	10.38 ft	MPI-8SR	9.07 ft	ESI-6	9.81 ft
EE-3	10.34 ft	MPI-3S	9.67 ft	MPI-9SR	8.52 ft	ESI-2R	12.19 ft
EE-4	11.49 ft	MPI-4S	6.89 ft	MPI-13BR	Auto over ft	ESI-5R	7.65 ft
MW-8	10.31 ft	MPI-4I	10.30 ft	MPI-14BR	9.25 ft		
MW-11	8.91 ft	MPI-5S	10.95 ft	MPI-15B	9.04 ft		

COMMENTS:	ESI-2R, EE-4: riser caps must be lowered some.
	MPI-5S: riser cap must be ground down. MPI-4S, MPI-4I: ground has heaved over risers.

Attachment C
Summary of Site Utility Costs and Projections
January to December 2016

Mr. C's Dry Cleaners Site - Remedial Treatment Utility Costs

ATTACHMENT C

NYSDEC Work Assignment #10C3074.0010.07

12 Months of System Operation and Maintenance

March 2016 Report

Gas, Telephone, and Electric

Utility Budget:	
Electric:	$25,300.00
Telephone:	$540.00
Gas	$1,120.00
Total:	$26,960.00

Utility Provider	Account #	E&E Cost Center	Description	Jan-2016	Feb-2016	Mar-2016	Apr-2016	May-2016	Jun-2016	
New York State E&G	1001-0310-422	EN-003229-0001-03TTO	Mr. C's Electric Costs	$ 577.59	$ 762.15	$ 265.95				
New York State E&G	76-311-11-015900-18									
National Fuel Gas	5819628-05	EN-003229-0001-03TTO	Mr. C's Natural Gas Costs	$ 68.33	$ 4.15	$ 58.82				
			Totals	$ 645.92	$ 766.30	$ 324.77	$ -	$ -	$ -	
				Jul-2016	Aug-2016	Sep-2016	Oct-2016	Nov-2016	Dec-2016	Ave. /Month
			Mr. C's Electric Costs							$ 535.23
			Mr. C's Natural Gas Costs							$ 43.77
			Totals	$0.00	$ -	$ -	$ -	$ -	$ -	$ 579.00
			Electric - Mr. C's		$1,605.69		Notes:			
			Natural Gas - Mr. C's		$ 131.30			Overbilled natural gas costs - no charges		
		Grand Total - NYSE&G/National Fuel Gas Costs To Date			$ 1,736.99			Estimated Reading	$ 333.44	in red -adjusted billing

Phone

Utility Provider	Phone #	E&E Cost Center	Location Description	Jan-2016	Feb-2016	Mar-2016	Apr-2016	May-2016	Jun-2016	
Verizon	716-652-0094	EN-003229-0001-03TTO	Mr. C's Telephone Costs							
Account #										
716 652 0094 416 26 2										
				Jul-2016	Aug-2016	Sep-2016	Oct-2016	Nov-2016	Dec-2016	Ave./Month
		EN-003229-0001-03TTO								$ -
		Verizon Costs to Date - Mr. C's			$ -					
		Grand Total All Utilities To Date			$ 1,736.99					

Mr. C's Dry Cleaners Site - Remedial Treatment Utility Costs

ATTACHMENT C

NYSDEC Work Assignment #11

12 Months of System Operation and Maintenance

March 2016 Report

Budget Remaining:

Electric:	**$23,694.31**
Telephone:	**$540.00**
Gas	**$988.70**
Total:	**$25,223.01**

	Optimum Operating Hours	Actual Operating Hours	Up-time Percentage	Capacity	Comments:
January-15	672	672	100.00%	9.7%	Very mild winter - very little snow.
February-15	0	0	0.00%	0.0%	System Shutdown
March-15	0	0	0.00%	0.0%	System Shutdown
April-15			#DIV/0!		
May-15			#DIV/0!		
June-15			#DIV/0!		
July-15			#DIV/0!		
August-15			#DIV/0!		
September-15			#DIV/0!		
October-15			#DIV/0!		
November-15			#DIV/0!		
December-15			#DIV/0!		
Totals to Date	**672**	**672**	**100.00%**		

* Percent Capacity is based on initial operating groundwater flows from the eight installed pumps from 9/02. Evaluated on total gallons discharged for monthly operating time.

Maximum pump discharges calculated as an average of 78 gpm as the total for all 8 pumps at the site if all pumps operate 100%. With the exception of groundwater pump RW-1, all others run on a batch basis.

Monthly Average Costs

Mr. C's Electric	$	535.23			
Agway Electric	$	-			
Mr. C's Gas	$	43.77			
Mr. C's Telephone	$	-			
Ave. Utility Cost Total	$	579.00	**times**	**12 Month Estimate**	**$7,526.96**

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BUFFALO CORPORATE CENTER
368 Pleasant View Drive
Lancaster, New York 14086
Tel: (716) 684-8060, Fax: (716) 684-0844

May 4, 2016

Mr. William Welling, Project Manager
New York State Department of Environmental Conservation
Division of Environmental Remediation
625 Broadway, 12th Floor
Albany, New York 12233 - 7013

Re: Mr. C's Dry Cleaners Site, Contract # D007617, Site # 915157
April 2016 Operations, Maintenance, and Monitoring Report

Dear Mr. Welling:

Ecology and Environment Engineering, P.C. (EEEPC) is pleased to provide the April 2016 Operations, Maintenance, and Monitoring (OM&M) Report for the Mr. C's Dry Cleaners Site, NYSDEC Site # 915157, located in the Village of East Aurora, New York. A summary of field activities prepared by EEEPC's subcontractor, Iyer Environmental Group, PLLC (IEG), is provided in Attachment A. The site utility information is provided in Attachment B.

Per your request, the Mr. C's treatment system has been shutdown since February 4, 2016 and will continue to be offline for three months to evaluate the possible rebound of contaminants in groundwater. No influent/effluent samples were performed during this time as a result of the treatment system shutdown. Monthly water depth measurements are taken at the site's groundwater monitoring wells, piezometers, and pumping wells during this shutdown period by IEG. Groundwater sampling was performed by EEEPC from April 25-May 2, 2016 to evaluate the potential for rebound of the volatile organic compounds around the Mr. C's site.

In review of the on-site treatment system operations, monitoring and maintenance for April 2016, EEEPC offers the following comments and highlights:

Operational Summary

Mr. C's Site – Remedial Operations and Maintenance Information

- The April 2016 summary of field activities and piezometer water level readings performed on 4/13/2016 from IEG are provided as Attachment A.

Subslab Depressurization Systems (SSDS)

- Property owner at 27 Whaley Ave. (David Dubois) has not returned EEEPC's calls for inspection of the SSDS unit. EEEPC will continue to contact to obtain access for inspection.
- Final engineering reports for all seven individual locations where SSDS units were installed were submitted in February and March 2016.
- Problems were encountered with moisture and freeze up in the fan system at the 586 Main Street "County Cupboard" SSDS unit. The SSDS is under review by GES and EEEPC.
- SSDS installation design at 31 Paine Street is currently in process.
- Discussion of new SSDS unit installation at 23 Paine Street is in progress. EEEPC needs to re-issue letter of determination of SSDS from NYSDOH to the new property owner. The new property owner of 23 Paine Street house as of November 2015 is David Dubois.

Status of Bioremediation Direct Push Injection Work

- Additional review of the recommendations in the summary report to be evaluated with the Remedial Site Optimization (RSO) program.
- The draft RSO was issued to NYSDEC on December 8, 2015.

Soil Vapor Intrusion Investigation Program (2015-2016)

- The Phase 3 SVII Report was issued to NYSDEC / NYSDOH on August 11, 2015.
- Discuss new property locations with NYSDEC / NYSDOH for SVII work in 2016.

Site Management Plan

- EEEPC submitted the updated/revised SMP to NYSDEC and NYSDEC Region 9 on March 2, 2015.
- This is an active site document, so future revisions will be performed once major changes to the management of the site are required after optimization evaluation is performed.

Annual Long-term Groundwater Monitoring Well Report

- The 2015 Annual Long-term Groundwater Monitoring Well field work was completed in October 2015.
- Report of 2015 annual Groundwater results was issued to NYSDEC on December 21, 2015.
- Another round of groundwater samples to be taken prior to treatment system restart. Groundwater sampling was started April 25, 2016 and completed May 2, 2016.

Periodic Review Report (PRR)

- The 2015 Periodic Review Report was issued to NYSDEC on January 29, 2015.

If you have questions regarding the April 2016 OM&M report summary, please do not hesitate to contact me at 716-684-8060.

Very Truly Yours,
Ecology and Environment Engineering, P. C.

Michael G. Steffan
Project Manager

cc: D. Szymanski, Region 9, NYSDEC - Buffalo w/ attachments
D. Iyer, IEG – w/attachments
CTF - 10C3074.0011.07

Table 1
Mr. C's Dry Cleaners Site Remediation
Site #915157
System Operation and Management

Month	Up-time		Treated Effluent (gallon)	VOC Removal		
	Reporting Hours	Operational Up-time		Influent VOCs (µg/L)	Effluent VOCs(µg/L)	VOCs Removed (lbs.)
(Up-time from 9/5/02 to 01/04/16)	**111,949.50**	**95.23%**	**128,814,819**	**NA**	**NA**	**1,614.16**
January 4, 2016 - February 1, 2016	672	100.00%	305,578	692.0	0.0	1.76
February 1, 2016 - February 29, 2016	0	0.00%	0	0.0	0.0	0.00
March 1, 2016 - March 31, 2016	0	0.00%	0	0.0	0.0	0.00
April 1, 2016 - April 30, 2016	0	0.00%	0	0.0	0.0	0.00

Total in 2016	**672.00**	**1.00**	**305,578**	**692.00**	**0.00**	**1.76**
Total from startup	**112,621.50**	**0.95**	**129,120,397.00**	**NA**	**NA**	**1,615.93**

NOTES:

1. Up-time based as percentage of total reporting hours.
2. Treatment system operated by the Tyree Organization Ltd. from 9/02 - 9/03.
3. Treatment system operated by O&M Enterprises Inc. from 10/03 - 7/07.
4. Treatment system operated by Iyer Environmental Group from 7/07 to present.
5. VOC removal calculations are based on monthly water samples and assumes samples are representative of the entire reporting period.
6. VOC removal calculations assume that non-detect values = 0 ug/L.
7. Total VOCs summations include estimated "J" values.
8. VOC removal calculations are based on effluent totalizer readings.
9. "Influent VOCs" and "Effluent VOCs" values given above is the summation of values for individual compounds given in monthly analytical reports.
10. Unit conversion: 1 pound = 453.5924 grams, 1 gallon = 3.785 liters
11. Formula for the VOC removal calculation:

$(VOCs_{Influent} - VOCs_{Effluent})(ug/L) \cdot (1g/10^6 ug) \cdot (1\ lb/453.5924\ g) \cdot (Monthly\ process\ water)(gal) \cdot (3.785\ L/gallon)$

12. Using the 2/2/16 analytical results.

Table 2
Mr. C's Dry Cleaners Site Remediation
Site #915157
Effluent Discharge Criteria & Analytical Compliance Results

Parameter/Analyte	Daily Maximum[1]	Units	February - Effluent Analytical Values - Compliance
Flow (Average)	N/A	gpd	No Sampling Performed
pH	6.0 - 9.0	standard units	
1,1 Dichloroethene	10	µg/L	
1,1 Dichloroethane	10	µg/L	
cis-1,2-dichloroethene	10	µg/L	
Trichloroethene	10	µg/L	
Tetrachloroethene	10	µg/L	
Vinyl Chloride	10	µg/L	
Benzene	5	µg/L	
Ethylbenzene	5	µg/L	
Methylene Chloride	10	µg/L	
1,1,1 Trichloroethane	10	µg/L	
Toluene	5	µg/L	
Methyl-t-Butyl Ether (MTBE)	NA	ug/L	
o-Xylene[2]	5	µg/L	
m, p-Xylene[2]	10	µg/L	
Total Xylenes	NA	ug/L	
Iron, total	600	µg/L	No Sampling Performed
Aluminum	4,000	µg/L	
Copper	48	µg/L	
Lead	11	µg/L	
Manganese	2,000	µg/L	
Silver	100	µg/L	
Vanadium	28	µg/L	
Zinc	230	µg/L	
Total Dissolved Solids	850	mg/L	
Total Suspended Solids	20	mg/L	
Hardness	N/A	mg/L	
Cyanide, Free	10	µg/L	

NOTES:

1. "Daily Maximum" excerpted from Attachment E of Addendum 1 to the Construction Contract Documents dated October 2000.
2. Analytical report did not differentiate between o-Xylene and m, p-Xylene. Total Xylene value reported is given in each line.
3. Shaded cells indicate that analytical value exceeds the "Daily Maximum."
4. "ND" indicates that the compound was not detected and lists the practical quantitation limit in parentheses.
5. "NA" indicates that analyses were not performed and data is unavailable.
6. Average flows based on effluent readings: **No treatment system operations in April 2016.**
7. "J" indicates an estimated value below the detection limit.
8. "B" indicates analyte found in the associated blank.
9. Removed from the required analysis list by NYSDEC Region 9 in February 2005.
10. "NS" indicates that the parameter analysis was not sampled.

40 **Indicates non-compliance with the NYSDEC effluent discharge requirements**
NR **Indicates Not Reported by Lab**

Table 3
Mr. C's Dry Cleaners Site Remediation
NYSDEC Site #915157
April 2016 VOC Analytical Summary

Compound	Based on the _____ Effluent Analytical Results				
	Influent Concentration* (ug/L)		Effluent Concentration** (ug/L)		Cleanup Efficiency*** (%)
Acetone	No Sampling Performed in April 2016				
Benzene					
2-Butanone					
cis-1, 2-Dichloroethene					
Chloroform					
Chloromethane					
Methylene chloride					
Methyl tert-butyl ether (MTBE)					
Methyl acetate					
Tetrachloroethene (PCE)					
Toluene					
Trichloroethene (TCE)					
Carbon Disulfide					
1,1,2 Trichloro-1,2,2-trifluororethane					
2-Hexanone					
4-Methyl-2-pentanone					
Cyclohexane					
trans-1,2-dichloroethene					
Chlorobenzene					
Methylcyclohexane					
Ethylbenzene					
Methyl acetate					
Vinyl Chloride					
Total Xylenes					
• The 1st progress monitoring sampling of the groundwater wells associated with the "pilot" bioaugmentation program was performed on July 1-2, 2013.	**0.0**		**0.00**		

Notes:
1. "NA" = Not applicable
2. "U" = Compound analyzed, but was not detected. Detection limit in parentheses.
3. "DJ" or "J" indicates an estimated value below the practical quantitation limit but above the method detection limit.
4. Non-detect values are assumed to be equal to zero for calculation of monthly average concentrations.
5. "D" indicates the compound concentration was obtained form a secondary dilution analysis.
6. Acetone was not detected in the influent sample above the MDL but detected in the effluent sample. It is not a contaminant of concern for the Mr. C's site.

* Detection Limits (<10) and (<50)
** Detection Limits (<1) and (<5)
*** Contaminants of Concern only

Attachment A
IEG Summary of Field Activities
April 2016

Mr. C's CLEANERS OM&M

SUMMARY OF FIELD ACTIVITIES BY IEG - 4/2016

DATE	ACTIVITY
1-Apr	Respond to report of unlocked Treatement Room. Inspect - OK
4-Apr	Do March End of Month Summaries. Shovel snow in front of Treatment Room. Drain SVE systems.
11-Apr	Drain SVE systems.
12-Apr	Get supplies. Make acid sprinkler system for Air Stripper cleaning.
13-Apr	Piezometer Readings. Piezometer Repairs.
14-Apr	Piezometer Readings. Piezometer Repairs. Get Supplies. PW-8 - fill settled area over previous excavation.
18-Apr	Drain SVE systems. Office work.
19-Apr	Return equipment to Treatment Room after removal for system shut down. Piezometer repair.
25-Apr	Drain SVE systems. Remove IEG tolls from Treatment Room.

Mr. C's CLEANERS OM&M

SUMMARY OF WATER PUMP MAINTENANCE BY IEG - 2016

as of Apr 2016

ID	CLEAN & INSPECT PUMP	REPLACED PUMP	REPAIR PUMP	PITLESS ADAPTER	INNER RING	HORIZONTAL PIPE	CHECK VALVE	CLEAN & INSPECT TRANSDUCER	REPLACE TRANSDUCER	REPLACE ANEROID BELLOWS	PUMP OUT WELL	CLEAN OUT & INSPECT ELECTRICAL BOX	ELECTRICAL BOX REPAIR
RW - 1	Jan 08, May 10, Jan 12, Oct 15	Feb 08, Jan 12	May 10, Nov 08					May 10, Jan 12, Oct 15					
PW - 2	Jun 08, Aug 09, May 10, Apr 13, Sep 15	Jul 08, Apr 13 Dec 15				Sep-15		Nov 11, May 10, Apr 13 Dec 15	Sep 09, Dec 11		Aug-09	Nov-11	Sep-09
PW - 3	Jun 08, Aug 09, May 10, Sep 15	Jul 08, Dec 11, Oct 15		Repair adapter		Sep-15		Aug 09, Nov 11, Oct 15	Dec 11, Sep 15		Aug-09	Nov 11, Sep 15	
PW - 4	Dec 07, May 08, Sep 09, May 10, Jan 12, Oct 15	Dec 07, Jan 12	Sep-13		Aug 13			May 10, Nov 11, Oct 15	Dec 11, Mar 08, Sep 08		Jul 09, Sep 09	Sep 09, Nov 11	Sep-09
PW - 5	Jan 12, May 08, Oct 15	Jul 08, Jan 12						Mar 11, Oct 15	Jan 12, Sep 08			Jan-12	
PW - 6	Jun 08, Jul 09, Jul 12, Nov 12, Aug 15	Jun 08, Jul 09, Aug 12, Nov 12, Sep 15		Replaced Aug 15		Jul 12, Nov 12, Sep 15	Aug 15	Aug 09, Jul 12, Dec 12, Apr 13, Aug 15	Sep 09, Sep 15	Aug 15	Aug-09	Aug 09, Sep 09, Sep 15	Jul 09, Sep 09
PW - 7	Jun 08, Jul 09, May 10, Oct 10, Aug 11, Mar 12, Jul 12, Nov 12, Aug 15	Nov 07, Jul 09, Oct 10, Nov 12		Replaced Aug 15		Jul 12, Nov 12	Aug 15	Oct 10, Aug 11, Mar 12, Jul 12, Dec 12, Aug 15			Aug 09, May 10, Aug 11		
PW - 8	Jun 08, Aug 09, May 10, Aug 11, Jul 12, Dec 12, Aug 15	Jul 08, Sep 09, Aug 11, Dec 12		Replaced Aug 15		Pipe 8/09, Jul 12, Sep 15	Aug 15	May 10, Aug 11, Jul 12, Dec 12, Apr 13, Aug 15		Aug 15	Aug 09, May 10, Aug 11	Apr 13, Aug 15	Apr-13

Mr. C's CLEANERS OM&M

SUMMARY OF WATER PUMP STATUS - 2016

as of Apr 2016

ID	NEEDS CLEANING & INSPECTION	NEEDS NEW PUMP	NEEDS NEW INNER RING	NEEDS P.A. OR PIPE	NEEDS WELL CLEAN-OUT	PITLESS ADAPTER	NEEDS HORIZONTAL LINE PURGE	NEEDS CHECK VALVE INSPECTION	NEEDS TRANSDUCER INSPECTION	NEEDS NEW TRANSDUCER	NEEDS ANEROID BELLOWS	NEEDS U.E. CLEANED	NEEDS U.E. REPAIR
RW-1	NO	NO	PZ-1B		YES				NO	NO	NO	NO	YES - bolts
PW-2	NO	NO	NO		NO				NO		NO	NO	YES - bolts
PW-3	NO	NO	NO						NO		NO	NO	NO
PW-4	NO	NO	PZ-4B						NO		NO	NO	YES - Asphalt patch
PW-5	NO	NO	NO		YES				NO			NO	NO
PW-6	NO	NO	NO				NO		NO	NO	NO	NO	DONE
PW-7	YES	NO	NO		NO		NO		NO	NO		NO	NO
PW-8	NO	NO	NO		NO		NO		NO	NO	NO	NO	NO

Mr. C's CLEANERS OM&M
STATUS OF FIELD ACTIVITIES BY IEG - 4/2016

ACTIVITY	DESCRIPTION	COMPLETION DATE/STATUS
PW-4 UE Level	Asphalt around Underground Enclosure has sunk, leaving it vulnerable to damage. Bring parking lot up to level with asphalt patch.	in progress
Rebuild JAC Pump as needed	Jesco America Corp recommends rebuilding the Redux pump when needed. Purchased rebuild kit.	in progress
Brace Effluent Pipe	David Szymanski (NYSDEC) inspected Treatment Room and said that the effluent pipe should be braced in (3) places to the north wall.	in progress
Inspect and clean Manholes	Inspect manholes near operating pumps. Pump out water in manholes and clean out remaining sediment and other material.	in progress
Trim Broken Piezometers	Some of the piezometers are broken. Measuring water levels is not precise when a pipe is broken. Identify and trim all broken piezometers.	Apr-16
Cool Treatment Room	Temperature in Treatment Room is well above 90 degrees during the summer months. Need to increase outside air inflow to the room.	in progress
Filter Housings are corroded	Flanges that seal filter baskets inside Rosedale Filter Housings are corroded. Sediment flows around filters instead of being trapped. Replace seals in existing housings (short term). Replace housings (long term).	in progress
Replace Air Stripper Latches	Around (6) latches on the Air Stripper trays are loose or broken. Reattach keepers with JB Weld. Replace broken latches and springs with new parts.	in progress
Repair Leaking Ball Valve	Influent ball valve east of EQ Tank drips. Inspect/clean & replace if necessary.	in progress
PZ-1B has damage	PZ-2B has surface concrete damage from severe winter conditions this year. Repair chipped concrete with epoxy material.	in progress
Redux usage rapidly increased	The rate of Redux usage increased rapidly during the past several months despite turning the Jesco Pump settings to their lowest levels. Clean pump and test. Adjust clamps on Redux line. Replace pump if necessary.	in progress
Reduce Influent Pump Rate	Lab Tests have shown high levels of VOCs. Try lengthening the time that the Influent Pump runs to increase the Air Sparging time inside the Air Stripper	in progress
Add Air Sparging System	Lab Tests have shown high levels of VOCs. Try adding an Air Sparging system to the sump box of the Air Stripper to increase the treatment of the effluent.	in progress
South Wall should be sealed	South Wall of Treatment Room has leaked into the neighboring unit several times when there have been water related problems. Trim wall insullation matting to reduce moisture retension. Seal base of wall with silicone caulking.	in progress
SVE Fan pipe collects water	The SVE Fan pipe on Building 586 collects water. There is a plug just below the fan to drain water out of the horizontal section of the pipe. Inspect system and make corrections to prevent the pipe from filling with water.	in progress
Repair PZ-4B	Inner ring of piezometer was severely damaged by Town's snowplow truck. Talked to Town - they will address problem in Spring. Inner ring must be replaced.	in progress
Sewer return line came apart	Sewer return line inside Treatment Room came apart resulting in raw sewage being splashed around in half the unit. Oversaw clean up by Ramsey Renovations. Cleaned some equipment and spray disinfectant in inaccessible areas. Replace equipment that was damaged beyond repair/cleaning.	Mar-16
Top cover contacts cap for ESI-2R, ESI-3, MPI-5S, EE-4, PZ-1C, PZ-3D	Movement over time of the riser relative to the inner ring has left the riser cap in contact with the top cover. Trimmed riser to create clearance for the riser cap.	Mar-16
Concrete inside inner ring obstructs Riser Cap	The concrete base inside the inner ring is level with the riser and causing interference with the riser cap. Identify problem piezometers (MPI-4S and MPI-4I). Removed concrete adjacent to riser.	Mar-16
Trim High Piezometer Risers	Some of the piezometer risers are so high that the riser cap interferes with the top cover. Either the inner ring has sunk or the risers have elevated since installation. Identify problem piezometers (PZ-4D) and trim a small amount off of the riser.	Apr-16
Concrete inside inner ring obstructs Riser Cap	Concrete base inside inner ring is level with riser and interferes with riser cap. Identify problem piezometers (MPI-1S). Removed concrete adjacent to riser.	Apr-16
Ground around PW-8 has sunk	The ground around PW-8 that was excavated to replace the pit-less adapter has sunk several inches. Add topsoil to level the area and add grass seed/mulch.	Apr-16
Remove Piezometer Lock	Some of the piezometers have padlocks on there riser caps which are defective or no longer have keys. Some of the caps are too tight to put back on the riser properly after removal. Identify problem piezometers (MPI-9SR). Remove lock.	Apr-16

MR. C's DRY CLEANERS SITE
NYSDEC Site #9-15-157
OM&M: PIEZOMETER WATER LEVEL LOG

Date: Apr 13-14, 2016 **Measurements taken by:** R. Allen

RW-1	10.70 ft	
PZ-1A	10.63 ft	
PZ-1B	10.47 ft	
PZ-1C	11.58 ft	
PZ-1D	11.74 ft	
PW-2	10.20 ft	
PZ-2A	10.21 ft	
PZ-2B	10.77 ft	
PZ-2C	10.04 ft	
MW-7	10.62 ft	Substitute for 2D
PW-3	10.80 ft	
PZ-3A	10.70 ft	
PZ-3B	10.79 ft	
PZ-3C	11.34 ft	
PZ-3D	10.03 ft	
PW-4	10.20 ft	
PZ-4A	10.73 ft	
PZ-4B	10.12 ft	
PZ-4C	----- ft	Sealed Over
PZ-4D	9.78 ft	Trimmed Riser

PW-5	9.70 ft	
PZ-5A	9.85 ft	
PZ-5B	10.12 ft	
PZ-5C	9.72 ft	
PZ-5D	10.50 ft	
PW-6	10.90 ft	
PZ-6A	11.04 ft	
PZ-6B	10.88 ft	
PZ-6C	11.14 ft	
PZ-6D	10.89 ft	Shown as RW-2 on Map
PW-7	10.40 ft	
MPI-6S	10.58 ft	
PZ-7B	10.70 ft	Trimmed Riser
OW-B	10.64 ft	
PZ-7D	7.52 ft	
PW-8	6.80 ft	
PZ-8A	7.55 ft	
PZ-8B	7.51 ft	
PZ-8C	7.40 ft	
PZ-8D	7.27 ft	Trimmed Riser

OTHER WELLS

EE-1	Paved over ft	MPI-1S	10.05 ft	MPI-7IR	10.45 ft	ESI-3	10.48 ft
EE-2	10.65 ft	MPI-2SR	10.67 ft	MPI-8SR	9.47 ft	ESI-6	10.14 ft
EE-3	10.51 ft	MPI-3S	9.99 ft	MPI-9SR	8.15 ft	ESI-2R	12.47 ft
EE-4	11.80 ft	MPI-4S	8.13 ft	MPI-13BR	8.72 ft	ESI-5R	7.81 ft
MW-8	10..67 ft	MPI-4I	10.57 ft	MPI-14BR	9.89 ft		
MW-11	9.23 ft	MPI-5S	11.31 ft	MPI-15B	9.37 ft		

COMMENTS:	MPI-6S - needs bolt MPI-1S - needs concrete chipped around riser
	PW-8 - needs soil added where excavation settled

Attachment B
Summary of Site Utility Costs and Projections
January to December 2016

Mr. C's Dry Cleaners Site - Remedial Treatment Utility Costs

ATTACHMENT B

NYSDEC Work Assignment #10C3074.0010.07

12 Months of System Operation and Maintenance

April 2016 Report

Utility Budget:

Electric:	$25,300.00
Telephone:	$540.00
Gas	$1,120.00
Total:	$26,960.00

Gas, Telephone, and Electric

Utility Provider	Account #	E&E Cost Center	Description	Jan-2016	Feb-2016	Mar-2016	Apr-2016	May-2016	Jun-2016
New York State E&G	1001-0310-422	EN-003229-0001-03TTO	Mr. C's Electric Costs	$ 577.59	$ 762.15	$ 265.95	$ 177.66		
New York State E&G	76-311-11-015900-18								
National Fuel Gas	5819628-05	EN-003229-0001-03TTO	Mr. C's Natural Gas Costs	$ 68.33	$ 4.15	$ 58.82	$ 8.76		
			Totals	$ 645.92	$ 766.30	$ 324.77	$ 186.42	$ -	$ -

				Jul-2016	Aug-2016	Sep-2016	Oct-2016	Nov-2016	Dec-2016	Ave. /Month
			Mr. C's Electric Costs							$ 445.84
			Mr. C's Natural Gas Costs							$ 35.02
			Totals	$0.00	$ -	$ -	$ -	$ -	$ -	$ 480.85

Electric - Mr. C's	$1,783.35
Natural Gas - Mr. C's	$ 140.06
Grand Total - NYSE&G/National Fuel Gas Costs To Date	$ 1,923.41

Notes:

Overbilled natural gas costs - no charges

Estimated Reading $ 333.44 in red -adjusted billing

Phone

Utility Provider	Phone #	E&E Cost Center	Location Description	Jan-2016	Feb-2016	Mar-2016	Apr-2016	May-2016	Jun-2016
Verizon	716-652-0094	EN-003229-0001-03TTO	Mr. C's Telephone Costs	$ 36.01	$ 36.16	$ 36.16	$ 36.16		
Account #									
716 652 0094 416 26 2									

				Jul-2016	Aug-2016	Sep-2016	Oct-2016	Nov-2016	Dec-2016	Ave./Month
		EN-003229-0001-03TTO								$ 36.12

Verizon Costs to Date - Mr. C's	$ 144.49
Grand Total All Utilities To Date	$ 2,067.90

Mr. C's Dry Cleaners Site - Remedial Treatment Utility Costs

ATTACHMENT B

NYSDEC Work Assignment #11

12 Months of System Operation and Maintenance

April 2016 Report

Budget Remaining:

Electric:	$23,516.65
Telephone:	$395.51
Gas	$979.94
Total:	$24,892.10

	Optimum Operating Hours	Actual Operating Hours	Up-time Percentage	Capacity	Comments:
January-15	672	672	100.00%	9.7%	Very mild winter - very little snow.
February-15	0	0	0.00%	0.0%	System Shutdown
March-15	0	0	0.00%	0.0%	System Shutdown
April-15	0	0	0.00%	0.0%	System Shutdown
May-15			#DIV/0!		
June-15			#DIV/0!		
July-15			#DIV/0!		
August-15			#DIV/0!		
September-15			#DIV/0!		
October-15			#DIV/0!		
November-15			#DIV/0!		
December-15			#DIV/0!		
Totals to Date	**672**	**672**	**100.00%**		

* Percent Capacity is based on initial operating groundwater flows from the eight installed pumps from 9/02. Evaluated on total gallons discharged for monthly operating time.

Maximum pump discharges calculated as an average of 78 gpm as the total for all 8 pumps at the site if all pumps operate 100%. With the exception of groundwater pump RW-1, all others run on a batch basis.

Monthly Average Costs

Mr. C's Electric	**$**	**445.84**			
Agway Electric	**$**	**-**			
Mr. C's Gas	**$**	**35.02**			
Mr. C's Telephone	**$**	**36.12**			
Ave. Utility Cost Total	**$**	**516.98**	**times**	**12 Month Estimate**	**$6,720.68**

ecology and environment engineering, p.c.
International Specialists in the Environment
BUFFALO CORPORATE CENTER
368 Pleasant View Drive
Lancaster, New York 14086
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June 6, 2016

Mr. William Welling, Project Manager
New York State Department of Environmental Conservation
Division of Environmental Remediation
625 Broadway, 12th Floor
Albany, New York 12233 - 7013

Re: Mr. C's Dry Cleaners Site, Contract # D007617, Site # 915157
Mayl 2016 Operations, Maintenance, and Monitoring Report

Dear Mr. Welling:

Ecology and Environment Engineering, P.C. (EEEPC) is pleased to provide the May 2016 Operations, Maintenance, and Monitoring (OM&M) Report for the Mr. C's Dry Cleaners Site, NYSDEC Site # 915157, located in the Village of East Aurora, New York. A summary of field activities prepared by EEEPC's subcontractor, Iyer Environmental Group, PLLC (IEG), is provided in Attachment A. The site utility information is provided in Attachment B.

Per your request, the Mr. C's treatment system has been shutdown since February 4, 2016 and will continue to be offline for three months to evaluate the possible rebound of contaminants in groundwater. No influent/effluent samples were performed during this time as a result of the treatment system shutdown. Monthly water depth measurements are taken at the site's groundwater monitoring wells, piezometers, and pumping wells during this shutdown period by IEG. Groundwater sampling was performed by EEEPC from April 25-May 2, 2016 to evaluate the potential for rebound of the volatile organic compounds around the Mr. C's site.

In review of the on-site treatment system operations, monitoring and maintenance for May 2016, EEEPC offers the following comments and highlights:

Operational Summary

Mr. C's Site – Remedial Operations and Maintenance Information

- The May 2016 summary of field activities and piezometer water level readings performed on 5/10/2016 and 5/11/2016 from IEG are provided as Attachment A.
- Just water level measurements were performed on the selected groundwater monitoring wells.

Subslab Depressurization Systems (SSDS)

- Property owner at 27 Whaley Ave. (David Dubois) has not returned EEEPC's calls for inspection of the SSDS unit. EEEPC will continue to contact to obtain access for inspection.
- Problems were encountered with moisture and freeze up in the fan system at the 586 Main Street "County Cupboard" SSDS unit. The SSDS is under review by GES and EEEPC.
- SSDS installation design at 31 Paine Street is currently in process.
- Discussion of new SSDS unit installation at 23 Paine Street is in progress. EEEPC needs to re-issue letter of determination of SSDS from NYSDOH to the new property owner. The new property owner of 23 Paine Street house as of November 2015 is David Dubois.

Status of Bioremediation Direct Push Injection Work

- Additional review of the recommendations in the summary report to be evaluated with the Remedial Site Optimization (RSO) program.
- The draft RSO was issued to NYSDEC on December 8, 2015.

Soil Vapor Intrusion Investigation Program (2015-2016)

- Discuss new property locations with NYSDEC / NYSDOH for SVII work in 2016.

Site Management Plan

- EEEPC submitted the updated/revised SMP to NYSDEC and NYSDEC Region 9 on March 2, 2015.
- This is an active site document, so future revisions will be performed once major changes to the management of the site are required after optimization evaluation is performed.

Annual Long-term Groundwater Monitoring Well Report

- Report of 2015 annual Groundwater results was issued to NYSDEC on December 21, 2015.
- Report of 2016 annual Groundwater results will be submitted in June 2016.
- Another round of groundwater samples to be taken prior to treatment system restart. Groundwater sampling was started April 25, 2016 and completed May 2, 2016.

Periodic Review Report (PRR)

- The 2015 Periodic Review Report was issued to NYSDEC on January 29, 2015.

If you have questions regarding the May 2016 OM&M report summary, please do not hesitate to contact me at 716-684-8060.

Very Truly Yours,
Ecology and Environment Engineering, P. C.

Michael G. Steffan
Project Manager

cc: D. Szymanski, Region 9, NYSDEC - Buffalo w/ attachments
D. Iyer, IEG – w/attachments
CTF - 10C3074.0011.07

Table 1
Mr. C's Dry Cleaners Site Remediation
Site #915157
System Operation and Management

Month	Up-time		Treated Effluent (gallon)	VOC Removal		
	Reporting Hours	Operational Up-time		Influent VOCs (µg/L)	Effluent VOCs(µg/L)	VOCs Removed (lbs.)
(Up-time from 9/5/02 to 01/04/16)	**111,949.50**	**95.23%**	**128,814,819**	**NA**	**NA**	**1,614.16**
January 4, 2016 - February 1, 2016	672	100.00%	305,578	692.0	0.0	1.76
February 1, 2016 - February 29, 2016	0	0.00%	0	0.0	0.0	0.00
March 1, 2016 - March 31, 2016	0	0.00%	0	0.0	0.0	0.00
April 1, 2016 - April 30, 2016	0	0.00%	0	0.0	0.0	0.00
April 31, 2016 - June 1, 2016	0	0.00%	0	0.0	0.0	0.00

Total in 2016	**672.00**	**1.00**	**305,578**	**692.00**	**0.00**	**1.76**
Total from startup	**112,621.50**	**0.95**	**129,120,397.00**	**NA**	**NA**	**1,615.93**

NOTES:

1. Up-time based as percentage of total reporting hours.
2. Treatment system operated by the Tyree Organization Ltd. from 9/02 - 9/03.
3. Treatment system operated by O&M Enterprises Inc. from 10/03 - 7/07.
4. Treatment system operated by Iyer Environmental Group from 7/07 to present.
5. VOC removal calculations are based on monthly water samples and assumes samples are representative of the entire reporting period.
6. VOC removal calculations assume that non-detect values = 0 ug/L.
7. Total VOCs summations include estimated "J" values.
8. VOC removal calculations are based on effluent totalizer readings.
9. "Influent VOCs" and "Effluent VOCs" values given above is the summation of values for individual compounds given in monthly analytical reports.
10. Unit conversion: 1 pound = 453.5924 grams, 1 gallon = 3.785 liters
11. Formula for the VOC removal calculation:

$(VOCs_{Influent} - VOCs_{Effluent})(ug/L) \cdot (1g/10^6 ug) \cdot (1\ lb/453.5924\ g) \cdot (Monthly\ process\ water)(gal) \cdot (3.785\ L/gallon)$

12. Using the 2/2/16 analytical results.

Table 2
Mr. C's Dry Cleaners Site Remediation
Site #915157
Effluent Discharge Criteria & Analytical Compliance Results

Parameter/Analyte	Daily Maximum[1]	Units	February - Effluent Analytical Values - Compliance
Flow (Average)	N/A	gpd	No Sampling Performed
pH	6.0 - 9.0	standard units	
1,1 Dichloroethene	10	µg/L	
1,1 Dichloroethane	10	µg/L	
cis-1,2-dichloroethene	10	µg/L	
Trichloroethene	10	µg/L	
Tetrachloroethene	10	µg/L	
Vinyl Chloride	10	µg/L	
Benzene	5	µg/L	
Ethylbenzene	5	µg/L	
Methylene Chloride	10	µg/L	
1,1,1 Trichloroethane	10	µg/L	
Toluene	5	µg/L	
Methyl-t-Butyl Ether (MTBE)	NA	ug/L	
o-Xylene[2]	5	µg/L	
m, p-Xylene[2]	10	µg/L	
Total Xylenes	NA	ug/L	
Iron, total	600	µg/L	No Sampling Performed
Aluminum	4,000	µg/L	
Copper	48	µg/L	
Lead	11	µg/L	
Manganese	2,000	µg/L	
Silver	100	µg/L	
Vanadium	28	µg/L	
Zinc	230	µg/L	
Total Dissolved Solids	850	mg/L	
Total Suspended Solids	20	mg/L	
Hardness	N/A	mg/L	
Cyanide, Free	10	µg/L	

NOTES:

1. "Daily Maximum" excerpted from Attachment E of Addendum 1 to the Construction Contract Documents dated October 2000.
2. Analytical report did not differentiate between o-Xylene and m, p-Xylene. Total Xylene value reported is given in each line.
3. Shaded cells indicate that analytical value exceeds the "Daily Maximum."
4. "ND" indicates that the compound was not detected and lists the practical quantitation limit in parentheses.
5. "NA" indicates that analyses were not performed and data is unavailable.
6. Average flows based on effluent readings: **No treatment system operations in May 2016.**
7. "J" indicates an estimated value below the detection limit.
8. "B" indicates analyte found in the associated blank.
9. Removed from the required analysis list by NYSDEC Region 9 in February 2005.
10. "NS" indicates that the parameter analysis was not sampled.

40 **Indicates non-compliance with the NYSDEC effluent discharge requirements**
NR **Indicates Not Reported by Lab**

Table 3
Mr. C's Dry Cleaners Site Remediation
NYSDEC Site #915157
May 2016 VOC Analytical Summary

Compound	Based on the _____ Effluent Analytical Results				
	Influent Concentration* (ug/L)		Effluent Concentration** (ug/L)		Cleanup Efficiency*** (%)
Acetone	No Sampling Performed in May 2016				
Benzene					
2-Butanone					
cis-1, 2-Dichloroethene					
Chloroform					
Chloromethane					
Methylene chloride					
Methyl tert-butyl ether (MTBE)					
Methyl acetate					
Tetrachloroethene (PCE)					
Toluene					
Trichloroethene (TCE)					
Carbon Disulfide					
1,1,2 Trichloro-1,2,2-trifluororethane					
2-Hexanone					
4-Methyl-2-pentanone					
Cyclohexane					
trans-1,2-dichloroethene					
Chlorobenzene					
Methylcyclohexane					
Ethylbenzene					
Methyl acetate					
Vinyl Chloride					
Total Xylenes					
• The 1st progress monitoring sampling of the groundwater wells associated with the "pilot" bioaugmentation program was performed on July 1-2, 2013.	**0.0**		**0.00**		

Notes:
1. "NA" = Not applicable
2. "U" = Compound analyzed, but was not detected. Detection limit in parentheses.
3. "DJ" or "J" indicates an estimated value below the practical quantitation limit but above the method detection limit.
4. Non-detect values are assumed to be equal to zero for calculation of monthly average concentrations.
5. "D" indicates the compound concentration was obtained form a secondary dilution analysis.
6. Acetone was not detected in the influent sample above the MDL but detected in the effluent sample. It is not a contaminant of concern for the Mr. C's site.

* Detection Limits (<10) and (<50)
** Detection Limits (<1) and (<5)
*** Contaminants of Concern only

Attachment A
IEG Summary of Field Activities
May2016

MR. C's DRY CLEANERS SITE
NYSDEC Site #9-15-157
OM&M: PIEZOMETER WATER LEVEL LOG

Date: May 10-11, 2016 **Measurements taken by:** R. Allen

RW-1	11.10 ft	
PZ-1A	11.05 ft	
PZ-1B	10.86 ft	
PZ-1C	12.00 ft	
PZ-1D	12.17 ft	
PW-2	10.70 ft	
PZ-2A	10.67 ft	
PZ-2B	11.01 ft	
PZ-2C	10.51 ft	
MW-7	11.02 ft	Substitute for 2D
PW-3	11.30 ft	
PZ-3A	11.19 ft	
PZ-3B	11.25 ft	
PZ-3C	11.73 ft	
PZ-3D	11.23 ft	
PW-4	10.60 ft	
PZ-4A	11.38 ft	
PZ-4B	10.54 ft	
PZ-4C	----- ft	Sealed Over
PZ-4D	10.17 ft	

PW-5	10.10 ft	
PZ-5A	10.43 ft	
PZ-5B	10.54 ft	
PZ-5C	10.13 ft	
PZ-5D	10.92 ft	
PW-6	11.30 ft	
PZ-6A	11.43 ft	
PZ-6B	11.29 ft	
PZ-6C	11.56 ft	
PZ-6D	11.28 ft	Shown as RW-2 on Map
PW-7	10.80 ft	
MPI-6S	11.04 ft	Needs Bolt
PZ-7B	11.11 ft	
OW-B	11.00 ft	
PZ-7D	10.56 ft	Product at 11.70
PW-8	7.30 ft	
PZ-8A	7.97 ft	
PZ-8B	7.92 ft	
PZ-8C	7.58 ft	
PZ-8D	7.84 ft	

OTHER WELLS

EE-1	Sealed ft	MPI-1S	10.41 ft	MPI-7IR	10.86 ft	ESI-3	10.85 ft
EE-2	12.20 ft	MPI-2SR	11.03 ft	MPI-8SR	9.84 ft	ESI-6	10.46 ft
EE-3	10.88 ft	MPI-3S	10.37 ft	MPI-9SR	9.38 ft	ESI-2R	12.89 ft
EE-4	12.23 ft	MPI-4S	9.76 ft	MPI-13BR	9.19 ft	ESI-5R	8.14 ft
MW-8	11.07 ft	MPI-4I	11.03 ft	MPI-14BR	10.12 ft		
MW-11	9.64 ft	MPI-5S	11.71 ft	MPI-15B	9.84 ft		

COMMENTS:	PZ-4B needs new inner ring
	MPI-9BR - lock should be cut so riser seats propertly

Mr. C's CLEANERS OM&M

SUMMARY OF FIELD ACTIVITIES BY IEG - 5/2016

DATE	ACTIVITY
3-May	Do April End of Month Summaries. Return IEG tools to Treatment Room. Drain SVE systems.
9-May	Inspect and drain SVE systems as needed.
10-May	Piezometer Readings. Piezometer Repairs.
11-May	Piezometer Readings. Piezometer Repairs. MPI-13BR - cut off padlock. Sweep spruce cones and needles off of Library Parking Lot.
23-May	Inspect and drain SVE systems as needed. OM&M office work.
24-May	OM&M office work.
25-May	OM&M office work.

Mr. C's CLEANERS OM&M
STATUS OF FIELD ACTIVITIES BY IEG - 5/2016

ACTIVITY	DESCRIPTION	COMPLETION DATE/STATUS
Sewer return line came apart	Sewer return line inside Treatment Room came apart resulting in raw sewage being splashed around in half the unit. Oversaw clean up by Ramsey Renovations. Cleaned some equipment and spray disinfectant in inaccessible areas. Replace equipment that was damaged beyond repair/cleaning.	Mar-16
Remove Piezometer Lock	Some piezometers have padlocks on riser caps which are defective or no longer have keys. Some caps are too tight to put back on riser properly after removal. Identify problem piezometers (MPI-9SR, MPI-13BR). Remove lock.	May-16
Trim Broken Piezometers	Some of the piezometers are broken. Measuring water levels is not precise when a pipe is broken. Identify and trim all broken piezometers.	Apr-16
Trim High Piezometer Risers	Some of the piezometer risers are so high that the riser cap interferes with the top cover. Either the inner ring has sunk or the risers have elevated since installation. Identify problem piezometers (PZ-4D) and trim a small amount off of the riser.	Apr-16
Concrete inside inner ring obstructs Riser Cap	The concrete base inside the inner ring is level with the riser and causing interference with the riser cap. Identify problem piezometers (MPI-1S). Removed concrete adjacent to riser.	Apr-16
Ground around PW-8 has sunk	The ground around PW-8 that was excavated to replace the pit-less adapter has sunk several inches. Add topsoil to level the area and add grass seed/mulch.	Apr-16
PW-4 UE Level	Asphalt around Underground Enclosure has sunk, leaving it vulnerable to damage. Bring parking lot up to level with asphalt patch.	in progress
Rebuild JAC Pump as needed	Jesco America Corp recommends rebuilding the Redux pump when needed. Purchased rebuild kit.	in progress
Brace Effluent Pipe	David Szymanski (NYSDEC) inspected Treatment Room and said that the effluent pipe should be braced in (3) places to the north wall.	in progress
Inspect and clean Manholes	Inspect manholes near operating pumps. Pump out water in manholes and clean out remaining sediment and other material.	in progress
Cool Treatment Room	Temperature in Treatment Room is well above 90 degrees during the summer months. Need to increase outside air inflow to the room.	in progress
Filter Housings are corroded	Flanges that seal filter baskets inside Rosedale Filter Housings are corroded. Sediment flows around filters instead of being trapped. Replace seals in existing housings (short term). Replace housings (long term).	in progress
Replace Air Stripper Latches	Around (6) latches on the Air Stripper trays are loose or broken. Reattach keepers with JB Weld. Replace broken latches and springs with new parts.	in progress
Repair Leaking Ball Valve	Influent ball valve east of EQ Tank drips. Inspect/clean & replace if necessary.	in progress
PZ-1B has damage	PZ-2B has surface concrete damage from severe winter conditions this year. Repair chipped concrete with epoxy material.	in progress
Redux usage rapidly increased	The rate of Redux usage increased rapidly during the past several months despite turning the Jesco Pump settings to their lowest levels. Clean pump and test. Adjust clamps on Redux line. Replace pump if necessary.	in progress
Reduce Influent Pump Rate	Lab Tests have shown high levels of VOCs. Try lengthening the time that the Influent Pump runs to increase the Air Sparging time inside the Air Stripper	in progress
Add Air Sparging System	Lab Tests have shown high levels of VOCs. Try adding an Air Sparging system to the sump box of the Air Stripper to increase the treatment of the effluent.	in progress
South Wall should be sealed	South Wall of Treatment Room has leaked into the neighboring unit several times when there have been water related problems. Trim wall insullation matting to reduce moisture retension. Seal base of wall with silicone caulking.	in progress
SVE Fan pipe collects water	The SVE Fan pipe on Building 586 collects water. There is a plug just below the fan to drain water out of the horizontal section of the pipe. Inspect system and make corrections to prevent the pipe from filling with water.	in progress
Repair PZ-4B	Inner ring of piezometer was severely damaged by Town's snowplow truck. Talked to Town - they will address problem in Spring. Inner ring must be replaced.	in progress

Mr. C's CLEANERS OM&M

SUMMARY OF WATER PUMP MAINTENANCE BY IEG - 2016

as of May 2016

ID	CLEAN & INSPECT PUMP	REPLACED PUMP	REPAIR PUMP	PITLESS ADAPTER	INNER RING	HORIZONTAL PIPE	CHECK VALVE	CLEAN & INSPECT TRANSDUCER	REPLACE TRANSDUCER	REPLACE ANEROID BELLOWS	PUMP OUT WELL	CLEAN OUT & INSPECT ELECTRICAL BOX	ELECTRICAL BOX REPAIR
RW - 1	Jan 08, May 10, Jan 12, Oct 15	Feb 08, Jan 12	May 10, Nov 08					May 10, Jan 12, Oct 15					
PW - 2	Jun 08, Aug 09, May 10, Apr 13, Sep 15	Jul 08, Apr 13 Dec 15				Sep-15		Nov 11, May 10, Apr 13 Dec 15	Sep 09, Dec 11		Aug-09	Nov-11	Sep-09
PW - 3	Jun 08, Aug 09, May 10, Sep 15	Jul 08, Dec 11, Oct 15		Repair adapter		Sep-15		Aug 09, Nov 11, Oct 15	Dec 11, Sep 15		Aug-09	Nov 11, Sep 15	
PW - 4	Dec 07, May 08, Sep 09, May 10, Jan 12, Oct 15	Dec 07, Jan 12	Sep-13		Aug 13			May 10, Nov 11, Oct 15	Dec 11, Mar 08, Sep 08		Jul 09, Sep 09	Sep 09, Nov 11	Sep-09
PW - 5	Jan 12, May 08, Oct 15	Jul 08, Jan 12						Mar 11, Oct 15	Jan 12, Sep 08			Jan-12	
PW - 6	Jun 08, Jul 09, Jul 12, Nov 12, Aug 15	Jun 08, Jul 09, Aug 12, Nov 12, Sep 15		Replaced Aug 15		Jul 12, Nov 12, Sep 15	Aug 15	Aug 09, Jul 12, Dec 12, Apr 13, Aug 15	Sep 09, Sep 15	Aug 15	Aug-09	Aug 09, Sep 09, Sep 15	Jul 09, Sep 09
PW - 7	Jun 08, Jul 09, May 10, Oct 10, Aug 11, Mar 12, Jul 12, Nov 12, Aug 15	Nov 07, Jul 09, Oct 10, Nov 12		Replaced Aug 15		Jul 12, Nov 12	Aug 15	Oct 10, Aug 11, Mar 12, Jul 12, Dec 12, Aug 15			Aug 09, May 10, Aug 11		
PW - 8	Jun 08, Aug 09, May 10, Aug 11, Jul 12, Dec 12, Aug 15	Jul 08, Sep 09, Aug 11, Dec 12		Replaced Aug 15		Pipe 8/09, Jul 12, Sep 15	Aug 15	May 10, Aug 11, Jul 12, Dec 12, Apr 13, Aug 15		Aug 15	Aug 09, May 10, Aug 11	Apr 13, Aug 15	Apr-13

Mr. C's CLEANERS OM&M

SUMMARY OF WATER PUMP STATUS - 2016

as of May 2016

ID	NEEDS CLEANING & INSPECTION	NEEDS NEW PUMP	NEEDS NEW INNER RING	NEEDS P.A. OR PIPE	NEEDS WELL CLEAN-OUT	PITLESS ADAPTER	NEEDS HORIZONTAL LINE PURGE	NEEDS CHECK VALVE INSPECTION	NEEDS TRANSDUCER INSPECTION	NEEDS NEW TRANSDUCER	NEEDS ANEROID BELLOWS	NEEDS U.E. CLEANED	NEEDS U.E. REPAIR
RW-1	NO	NO	PZ-1B		**YES**				NO	NO	NO	NO	YES - bolts
PW-2	NO	NO	NO		**NO**				NO		NO	NO	YES - bolts
PW-3	NO	NO	NO						NO		NO	NO	NO
PW-4	NO	NO	PZ-4B						NO		NO	NO	YES - Asphalt patch
PW-5	NO	NO	NO		YES				NO			NO	NO
PW-6	NO	NO	NO				NO		NO	NO	NO	NO	DONE
PW-7	YES	NO	NO		NO		NO		NO	NO		NO	NO
PW-8	NO	NO	NO		NO		NO		NO	NO	NO	NO	NO

Attachment B
Summary of Site Utility Costs and Projections
January to December 2016

Mr. C's Dry Cleaners Site - Remedial Treatment Utility Costs

ATTACHMENT B

NYSDEC Work Assignment #10C3074.0010.07

12 Months of System Operation and Maintenance

May 2016 Report

Gas, Telephone, and Electric

Utility Budget:	
Electric:	$25,300.00
Telephone:	$540.00
Gas	$1,120.00
Total:	$26,960.00

Utility Provider	Account #	E&E Cost Center	Description	Jan-2016	Feb-2016	Mar-2016	Apr-2016	May-2016	Jun-2016
New York State E&G	1001-0310-422	EN-003229-0001-03TTO	Mr. C's Electric Costs	$ 577.59	$ 762.15	$ 265.95	$ 177.66	$ 188.45	
New York State E&G	76-311-11-015900-18								
National Fuel Gas	5819628-05	EN-003229-0001-03TTO	Mr. C's Natural Gas Costs	$ 68.33	$ 4.15	$ 58.82	$ 8.76	$ 24.37	
			Totals	**$ 645.92**	**$ 766.30**	**$ 324.77**	**$ 186.42**	**$ 212.82**	**$ -**

	Jul-2016	Aug-2016	Sep-2016	Oct-2016	Nov-2016	Dec-2016	Ave. /Month
Mr. C's Electric Costs							$ 394.36
Mr. C's Natural Gas Costs							$ 32.89
Totals	**$0.00**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 427.25**

Electric - Mr. C's	**$1,971.80**
Natural Gas - Mr. C's	**$ 164.43**
Grand Total - NYSE&G/National Fuel Gas Costs To Date	**$ 2,136.23**

Notes:

Overbilled natural gas costs - no charges

Estimated Reading $ 333.44 in red -adjusted billing

Phone

Utility Provider	Phone #	E&E Cost Center	Location Description	Jan-2016	Feb-2016	Mar-2016	Apr-2016	May-2016	Jun-2016
Verizon	716-652-0094	EN-003229-0001-03TTO	Mr. C's Telephone Costs	$ 36.01	$ 36.16	$ 36.16	$ 36.16		
Account #									
716 652 0094 416 26 2									

	Jul-2016	Aug-2016	Sep-2016	Oct-2016	Nov-2016	Dec-2016	Ave./Month
EN-003229-0001-03TTO							$ 36.12

Verizon Costs to Date - Mr. C's	**$ 144.49**
Grand Total All Utilities To Date	**$ 2,280.72**

Mr. C's Dry Cleaners Site - Remedial Treatment Utility Costs

ATTACHMENT B

NYSDEC Work Assignment #11

12 Months of System Operation and Maintenance

May 2016 Report

	Optimum Operating Hours	Actual Operating Hours	Up-time Percentage	Capacity	Comments:
January-16	672	672	100.00%	9.7%	Very mild winter - very little snow.
February-16	0	0	0.00%	0.0%	System Shutdown
March-16	0	0	0.00%	0.0%	System Shutdown
April-16	0	0	0.00%	0.0%	System Shutdown
May-16	0	0	0.00%	0.0%	System Shutdown
June-16			#DIV/0!		
July-16			#DIV/0!		
August-16			#DIV/0!		
September-16			#DIV/0!		
October-16			#DIV/0!		
November-16			#DIV/0!		
December-16			#DIV/0!		
Totals to Date	**672**	**672**	**100.00%**		

Budget Remaining:

Electric:	**$23,328.20**
Telephone:	**$395.51**
Gas	**$955.57**
Total:	**$24,679.28**

* Percent Capacity is based on initial operating groundwater flows from the eight installed pumps from 9/02. Evaluated on total gallons discharged for monthly operating time.

Maximum pump discharges calculated as an average of 78 gpm as the total for all 8 pumps at the site if all pumps operate 100%. With the exception of groundwater pump RW-1, all others run on a batch basis.

Monthly Average Costs

Mr. C's Electric	**$**	**394.36**			
Agway Electric	**$**	**-**			
Mr. C's Gas	**$**	**32.89**			
Mr. C's Telephone	**$**	**36.12**			
Ave. Utility Cost Total	**$**	**463.37**	**times**	**12 Month Estimate**	**$6,023.79**

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BUFFALO CORPORATE CENTER
368 Pleasant View Drive
Lancaster, New York 14086
Tel: (716) 684-8060, Fax: (716) 684-0844

July 6, 2016

Mr. William Welling, Project Manager
New York State Department of Environmental Conservation
Division of Environmental Remediation
625 Broadway, 12th Floor
Albany, New York 12233 - 7013

Re: Mr. C's Dry Cleaners Site, Contract # D007617, Site # 915157
June 2016 Operations, Maintenance, and Monitoring Report

Dear Mr. Welling:

Ecology and Environment Engineering, P.C. (EEEPC) is pleased to provide the June 2016 Operations, Maintenance, and Monitoring (OM&M) Report for the Mr. C's Dry Cleaners Site, NYSDEC Site # 915157, located in the Village of East Aurora, New York. A summary of field activities prepared by EEEPC's subcontractor, Iyer Environmental Group, PLLC (IEG), is provided in Attachment A. The site utility information is provided in Attachment B.

Per your request, the Mr. C's treatment system has been shutdown since February 4, 2016 and will continue to be offline for three months to evaluate the possible rebound of contaminants in groundwater. No influent/effluent samples were performed during this time as a result of the treatment system shutdown. Monthly water depth measurements are taken at the site's groundwater monitoring wells, piezometers, and pumping wells during this shutdown period by IEG. Groundwater sampling was performed by EEEPC from April 25-May 2, 2016 to evaluate the potential for rebound of the volatile organic compounds around the Mr. C's site.

In review of the on-site treatment system operations, monitoring and maintenance for June 2016, EEEPC offers the following comments and highlights:

Operational Summary

Mr. C's Site – Remedial Operations and Maintenance Information

- The June 2016 summary of field activities performed on 6/1/2016 and 6/27/2016 from IEG are provided as Attachment A.

Subslab Depressurization Systems (SSDS)

- Property owner at 27 Whaley Ave. (David Dubois) has not returned EEEPC's calls for inspection of the SSDS unit. EEEPC will continue to contact to obtain access for inspection.
- Problems were encountered with moisture and freeze up in the fan system at the 586 Main Street "County Cupboard" SSDS unit. The SSDS is under review by GES and EEEPC.
- SSDS installation design at 31 Paine Street is currently in process.
- Discussion of new SSDS unit installation at 23 Paine Street is in progress. EEEPC needs to re-issue letter of determination of SSDS from NYSDOH to the new property owner. The new property owner of 23 Paine Street house as of November 2015 is David Dubois.

Status of Bioremediation Direct Push Injection Work

- Additional review of the recommendations in the summary report to be evaluated with the Remedial Site Optimization (RSO) program.
- The draft RSO was issued to NYSDEC on December 8, 2015.

Soil Vapor Intrusion Investigation Program (2015-2016)

- Discuss new property locations with NYSDEC / NYSDOH for SVII work in 2016.

Site Management Plan

- EEEPC submitted the updated/revised SMP to NYSDEC and NYSDEC Region 9 on March 2, 2015.
- This is an active site document, so future revisions will be performed once major changes to the management of the site are required after optimization evaluation is performed.

Annual Long-term Groundwater Monitoring Well Report

- Report of 2015 annual Groundwater results was issued to NYSDEC on December 21, 2015.
- The 2016 Groundwater sampling/analytical results report was submitted on June 16, 2016.

Periodic Review Report (PRR)

- The 2015 Periodic Review Report was issued to NYSDEC on January 29, 2015.

If you have questions regarding the June 2016 OM&M report summary, please do not hesitate to contact me at 716-684-8060.

Very Truly Yours,
Ecology and Environment Engineering, P. C.

Michael G. Steffan
Project Manager

cc: D. Szymanski, Region 9, NYSDEC - Buffalo w/ attachments
D. Iyer, IEG – w/attachments
CTF - 10C3074.0011.07

Table 1
Mr. C's Dry Cleaners Site Remediation
Site #915157
System Operation and Management

Month	Up-time		Treated Effluent (gallon)	VOC Removal		
	Reporting Hours	Operational Up-time		Influent VOCs (µg/L)	Effluent VOCs(µg/L)	VOCs Removed (lbs.)
(Up-time from 9/5/02 to 01/04/16)	**111,949.50**	**95.23%**	**128,814,819**	**NA**	**NA**	**1,614.16**
January 4, 2016 - February 1, 2016	672	100.00%	305,578	692.0	0.0	1.76
February 1, 2016 - February 29, 2016	0	0.00%	0	0.0	0.0	0.00
March 1, 2016 - March 31, 2016	0	0.00%	0	0.0	0.0	0.00
April 1, 2016 - April 30, 2016	0	0.00%	0	0.0	0.0	0.00
April 31, 2016 - June 1, 2016	0	0.00%	0	0.0	0.0	0.00
June 1, 2016 -June 27, 2016	0	0.00%	0	0.0	0.0	0.00

Total in 2016	**672.00**	**1.00**	**305,578**	**692.00**	**0.00**	**1.76**
Total from startup	**112,621.50**	**0.95**	**129,120,397.00**	**NA**	**NA**	**1,615.93**

NOTES:

1. Up-time based as percentage of total reporting hours.
2. Treatment system operated by the Tyree Organization Ltd. from 9/02 - 9/03.
3. Treatment system operated by O&M Enterprises Inc. from 10/03 - 7/07.
4. Treatment system operated by Iyer Environmental Group from 7/07 to present.
5. VOC removal calculations are based on monthly water samples and assumes samples are representative of the entire reporting period.
6. VOC removal calculations assume that non-detect values = 0 ug/L.
7. Total VOCs summations include estimated "J" values.
8. VOC removal calculations are based on effluent totalizer readings.
9. "Influent VOCs" and "Effluent VOCs" values given above is the summation of values for individual compounds given in monthly analytical reports.
10. Unit conversion: 1 pound = 453.5924 grams, 1 gallon = 3.785 liters
11. Formula for the VOC removal calculation:

$(VOCs_{Influent} - VOCs_{Effluent})(ug/L) \cdot (1g/10^6 ug) \cdot (1\ lb/453.5924\ g) \cdot (Monthly\ process\ water)(gal) \cdot (3.785\ L/gallon)$

12. Using the 2/2/16 analytical results.

Table 2
Mr. C's Dry Cleaners Site Remediation
Site #915157
Effluent Discharge Criteria & Analytical Compliance Results

Parameter/Analyte	Daily Maximum[1]	Units	February - Effluent Analytical Values - Compliance
Flow (Average)	N/A	gpd	No Sampling Performed
pH	6.0 - 9.0	standard units	
1,1 Dichloroethene	10	µg/L	
1,1 Dichloroethane	10	µg/L	
cis-1,2-dichloroethene	10	µg/L	
Trichloroethene	10	µg/L	
Tetrachloroethene	10	µg/L	
Vinyl Chloride	10	µg/L	
Benzene	5	µg/L	
Ethylbenzene	5	µg/L	
Methylene Chloride	10	µg/L	
1,1,1 Trichloroethane	10	µg/L	
Toluene	5	µg/L	
Methyl-t-Butyl Ether (MTBE)	NA	ug/L	
o-Xylene[2]	5	µg/L	
m, p-Xylene[2]	10	µg/L	
Total Xylenes	NA	ug/L	
Iron, total	600	µg/L	No Sampling Performed
Aluminum	4,000	µg/L	
Copper	48	µg/L	
Lead	11	µg/L	
Manganese	2,000	µg/L	
Silver	100	µg/L	
Vanadium	28	µg/L	
Zinc	230	µg/L	
Total Dissolved Solids	850	mg/L	
Total Suspended Solids	20	mg/L	
Hardness	N/A	mg/L	
Cyanide, Free	10	µg/L	

NOTES:

1. "Daily Maximum" excerpted from Attachment E of Addendum 1 to the Construction Contract Documents dated October 2000.
2. Analytical report did not differentiate between o-Xylene and m, p-Xylene. Total Xylene value reported is given in each line.
3. Shaded cells indicate that analytical value exceeds the "Daily Maximum."
4. "ND" indicates that the compound was not detected and lists the practical quantitation limit in parentheses.
5. "NA" indicates that analyses were not performed and data is unavailable.
6. Average flows based on effluent readings: **No treatment system operations in June 2016.**
7. "J" indicates an estimated value below the detection limit.
8. "B" indicates analyte found in the associated blank.
9. Removed from the required analysis list by NYSDEC Region 9 in February 2005.
10. "NS" indicates that the parameter analysis was not sampled.

40 **Indicates non-compliance with the NYSDEC effluent discharge requirements**
NR **Indicates Not Reported by Lab**

Table 3
Mr. C's Dry Cleaners Site Remediation
NYSDEC Site #915157
June 2016 VOC Analytical Summary

Compound	Based on the _____ Effluent Analytical Results				
	Influent Concentration* (ug/L)		Effluent Concentration** (ug/L)		Cleanup Efficiency*** (%)
Acetone	No Sampling Performed in June 2016				
Benzene					
2-Butanone					
cis-1, 2-Dichloroethene					
Chloroform					
Chloromethane					
Methylene chloride					
Methyl tert-butyl ether (MTBE)					
Methyl acetate					
Tetrachloroethene (PCE)					
Toluene					
Trichloroethene (TCE)					
Carbon Disulfide					
1,1,2 Trichloro-1,2,2-trifluororethane					
2-Hexanone					
4-Methyl-2-pentanone					
Cyclohexane					
trans-1,2-dichloroethene					
Chlorobenzene					
Methylcyclohexane					
Ethylbenzene					
Methyl acetate					
Vinyl Chloride					
Total Xylenes					
• The 1st progress monitoring sampling of the groundwater wells associated with the "pilot" bioaugmentation program was performed on July 1-2, 2013.	**0.0**		**0.00**		

Notes:
1. "NA" = Not applicable
2. "U" = Compound analyzed, but was not detected. Detection limit in parentheses.
3. "DJ" or "J" indicates an estimated value below the practical quantitation limit but above the method detection limit.
4. Non-detect values are assumed to be equal to zero for calculation of monthly average concentrations.
5. "D" indicates the compound concentration was obtained form a secondary dilution analysis.
6. Acetone was not detected in the influent sample above the MDL but detected in the effluent sample. It is not a contaminant of concern for the Mr. C's site.

* Detection Limits (<10) and (<50)
** Detection Limits (<1) and (<5)
*** Contaminants of Concern only

Attachment A
IEG Summary of Field Activities
June 2016

Mr. C's CLEANERS OM&M

SUMMARY OF FIELD ACTIVITIES BY IEG - 6/2016

DATE	ACTIVITY
1-Jun	Inspect and drain SVE systems as needed. End of month summaries. OM&M office work.
6-Jun	Inspect and drain SVE systems as needed.
13-Jun	Inspect and drain SVE systems as needed.
20-Jun	Inspect and drain SVE systems as needed. Inventory all drums in Treatment Room.
27-Jun	Inspect and drain SVE systems as needed. Inspect unit for water damage after neighbor reports damage to her unit. Talked to IAE about water concern.

Attachment B
Summary of Site Utility Costs and Projections
January to December 2016

Mr. C's Dry Cleaners Site - Remedial Treatment Utility Costs

ATTACHMENT B

NYSDEC Work Assignment #10C3074.0010.07

12 Months of System Operation and Maintenance

June 2016 Report

Utility Budget:

Electric:	$25,300.00
Telephone:	$540.00
Gas	$1,120.00
Total:	$26,960.00

Gas, Telephone, and Electric

Utility Provider	Account #	E&E Cost Center	Description	Jan-2016	Feb-2016	Mar-2016	Apr-2016	May-2016	Jun-2016			
New York State E&G	1001-0310-422	EN-003229-0001-03TTO	Mr. C's Electric Costs	$ 577.59	$ 762.15	$ 265.95	$ 177.66	$ 188.45	$163.34			
New York State E&G	76-311-11-015900-18											
National Fuel Gas	5819628-05	EN-003229-0001-03TTO	Mr. C's Natural Gas Costs	$ 68.33	$ 4.15	$ 58.82	$ 8.76	$ 24.37	$17.22			
			Totals	**$ 645.92**	**$ 766.30**	**$ 324.77**	**$ 186.42**	**$ 212.82**	**$ 180.56**			
				Jul-2016	**Aug-2016**	**Sep-2016**	**Oct-2016**	**Nov-2016**	**Dec-2016**			**Ave. /Month**
			Mr. C's Electric Costs									**$ 355.86**
			Mr. C's Natural Gas Costs									**$ 30.28**
			Totals	**$0.00**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**			**$ 386.13**
			Electric - Mr. C's		**$2,135.14**		**Notes:**					
			Natural Gas - Mr. C's		**$ 181.65**			Overbilled natural gas costs - no charges				
		Grand Total - NYSE&G/National Fuel Gas Costs To Date		**$**	**2,316.79**			**Estimated Reading**		$ 333.44	in red -adjusted billing	

Phone

Utility Provider	Phone #	E&E Cost Center	Location Description	Jan-2016	Feb-2016	Mar-2016	Apr-2016	May-2016	Jun-2016			
Verizon	716-652-0094	EN-003229-0001-03TTO	Mr. C's Telephone Costs	$ 36.01	$ 36.16	$ 36.16	$ 36.16	$ 36.16				
Account #												
716 652 0094 416 26 2												
				Jul-2016	**Aug-2016**	**Sep-2016**	**Oct-2016**	**Nov-2016**	**Dec-2016**			**Ave./Month**
		EN-003229-0001-03TTO										**$ 36.13**
		Verizon Costs to Date - Mr. C's		**$**	**180.65**							
		Grand Total All Utilities To Date		**$**	**2,497.44**							

Mr. C's Dry Cleaners Site - Remedial Treatment Utility Costs

ATTACHMENT B

NYSDEC Work Assignment #11

12 Months of System Operation and Maintenance

June 2016 Report

Budget Remaining:

Electric:	**$23,164.86**	
Telephone:	**$359.35**	
Gas	**$938.35**	
Total:	**$24,462.56**	

	Optimum Operating Hours	Actual Operating Hours	Up-time Percentage	Capacity	Comments:
January-16	672	672	100.00%	9.7%	Very mild winter - very little snow.
February-16	0	0	0.00%	0.0%	System Shutdown
March-16	0	0	0.00%	0.0%	System Shutdown
April-16	0	0	0.00%	0.0%	System Shutdown
May-16	0	0	0.00%	0.0%	System Shutdown
June-16	0	0	0.00%	0.0%	System Shutdown
July-16			#DIV/0!		
August-16			#DIV/0!		
September-16			#DIV/0!		
October-16			#DIV/0!		
November-16			#DIV/0!		
December-16			#DIV/0!		
Totals to Date	**672**	**672**	**100.00%**		

* Percent Capacity is based on initial operating groundwater flows from the eight installed pumps from 9/02. Evaluated on total gallons discharged for monthly operating time.

Maximum pump discharges calculated as an average of 78 gpm as the total for all 8 pumps at the site if all pumps operate 100%. With the exception of groundwater pump RW-1, all others run on a batch basis.

Monthly Average Costs

Mr. C's Electric	**$**	**355.86**			
Agway Electric	**$**	**-**			
Mr. C's Gas	**$**	**30.28**			
Mr. C's Telephone	**$**	**36.13**			
Ave. Utility Cost Total	**$**	**422.26**	**times**	**12 Month Estimate**	**$5,489.40**

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August 10, 2016

Mr. William Welling, Project Manager
New York State Department of Environmental Conservation
Division of Environmental Remediation
625 Broadway, 12th Floor
Albany, New York 12233 - 7013

Re: Mr. C's Dry Cleaners Site, Contract # D007617, Site # 915157
July 2016 Operations, Maintenance, and Monitoring Report

Dear Mr. Welling:

Ecology and Environment Engineering, P.C. (EEEPC) is pleased to provide the July 2016 Operations, Maintenance, and Monitoring (OM&M) Report for the Mr. C's Dry Cleaners Site, NYSDEC Site # 915157, located in the Village of East Aurora, New York. A summary of field activities prepared by EEEPC's subcontractor, Iyer Environmental Group, PLLC (IEG), is provided in Attachment A. The site utility information is provided in Attachment B.

Per your request, the Mr. C's treatment system has been shutdown since February 4, 2016 and will continue to be offline until the Remedial Site Optimization (RSO) report is reviewed by the NYSDEC for determination of the future treatment requirements for the site.

No influent/effluent samples were performed during this time as a result of the treatment system shutdown. Monthly water depth measurements are taken at the site's groundwater monitoring wells, piezometers, and pumping wells during this shutdown period by IEG. Groundwater sampling was performed by EEEPC from April 25-May 2, 2016 to evaluate the potential for rebound of the volatile organic compounds around the Mr. C's site. The Groundwater Report was issued on June 16, 2016.

In review of the on-site treatment system operations, monitoring and maintenance for July 2016, EEEPC offers the following comments and highlights:

Operational Summary

Mr. C's Site – Remedial Operations and Maintenance Information

- The July 2016 summary of field activities performed between 6/27/2016 and 7/31/2016 from IEG are provided as Attachment A.

- The soil vapor extraction systems, underground enclosures, monitoring wells, and piezometers were inspected as needed.
- The damaged bolt to piezometer PZ-7D was replaced on 07/07/2016.
- A leaking hose in the treatment building was replaced on 07/22/2016.

Subslab Depressurization Systems (SSDS)

- Property owner at 27 Whaley Ave. (David Dubois) has not returned EEEPC's calls for inspection of the SSDS unit. EEEPC will continue to contact to obtain access for inspection.
- Problems were encountered with moisture and freeze up in the fan system at the 586 Main Street "County Cupboard" SSDS unit. The SSDS is under review by GES and EEEPC.
- SSDS installation design at 31 Paine Street is currently in process.
- Discussion of new SSDS unit installation at 23 Paine Street is in progress. EEEPC needs to re-issue letter of determination of SSDS from NYSDOH to the new property owner. The new property owner of 23 Paine Street house as of November 2015 is David Dubois.

Status of Bioremediation Direct Push Injection Work

- Additional review of the recommendations in the summary report to be evaluated with the Remedial Site Optimization (RSO) program.
- The draft RSO was issued to NYSDEC on December 8, 2015.

Soil Vapor Intrusion Investigation Program (2015-2016)

- Discuss new property locations with NYSDEC / NYSDOH for SVII work in 2016.

Site Management Plan

- EEEPC submitted the updated/revised SMP to NYSDEC and NYSDEC Region 9 on March 2, 2015.
- This is an active site document, so future revisions will be performed once major changes to the management of the site are required after optimization evaluation is performed.

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- Report of 2015 annual Groundwater results was issued to NYSDEC on December 21, 2015.
- The 2016 Groundwater sampling/analytical results report was submitted on June 16, 2016.

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If you have questions regarding the July 2016 OM&M report summary, please do not hesitate to contact me at 716-684-8060.

Very Truly Yours,
Ecology and Environment Engineering, P. C.

Michael G. Steffan
Project Manager

cc: D. Szymanski, Region 9, NYSDEC - Buffalo w/ attachments
D. Iyer, IEG – w/attachments
CTF - 10C3074.0011.07

Table 1
Mr. C's Dry Cleaners Site Remediation
Site #915157
System Operation and Management

Month	Up-time		Treated Effluent (gallon)	VOC Removal		
	Reporting Hours	Operational Up-time		Influent VOCs (µg/L)	Effluent VOCs(µg/L)	VOCs Removed (lbs.)
(Up-time from 9/5/02 to 01/04/16)	**111,949.50**	**95.23%**	**128,814,819**	**NA**	**NA**	**1,614.16**
January 4, 2016 - February 1, 2016	672	100.00%	305,578	692.0	0.0	1.76
February 1, 2016 - February 29, 2016	0	0.00%	0	0.0	0.0	0.00
March 1, 2016 - March 31, 2016	0	0.00%	0	0.0	0.0	0.00
April 1, 2016 - April 30, 2016	0	0.00%	0	0.0	0.0	0.00
April 31, 2016 - June 1, 2016	0	0.00%	0	0.0	0.0	0.00
June 1, 2016 - June 27, 2016	0	0.00%	0	0.0	0.0	0.00
June 27, 2016 - July 31, 2016	0	0.00%	0	0.0	0.0	0.00

Total in 2016	**672.00**	**1.00**	**305,578**	**692.00**	**0.00**	**1.76**
Total from startup	**112,621.50**	**0.95**	**129,120,397.00**	**NA**	**NA**	**1,615.93**

NOTES:

1. Up-time based as percentage of total reporting hours.
2. Treatment system operated by the Tyree Organization Ltd. from 9/02 - 9/03.
3. Treatment system operated by O&M Enterprises Inc. from 10/03 - 7/07.
4. Treatment system operated by Iyer Environmental Group from 7/07 to present.
5. VOC removal calculations are based on monthly water samples and assumes samples are representative of the entire reporting period.
6. VOC removal calculations assume that non-detect values = 0 ug/L.
7. Total VOCs summations include estimated "J" values.
8. VOC removal calculations are based on effluent totalizer readings.
9. "Influent VOCs" and "Effluent VOCs" values given above is the summation of values for individual compounds given in monthly analytical reports.
10. Unit conversion: 1 pound = 453.5924 grams, 1 gallon = 3.785 liters
11. Formula for the VOC removal calculation:

$(VOCs_{Influent} - VOCs_{Effluent})(ug/L) \cdot (1g/10^6 ug) \cdot (1\ lb/453.5924\ g) \cdot (Monthly\ process\ water)(gal) \cdot (3.785\ L/gallon)$

12. Using the 2/2/16 analytical results.

Table 2
Mr. C's Dry Cleaners Site Remediation
Site #915157
Effluent Discharge Criteria & Analytical Compliance Results

Parameter/Analyte	Daily Maximum[1]	Units	July - Effluent Analytical Values - Compliance
Flow (Average)	N/A	gpd	No Sampling Performed
pH	6.0 - 9.0	standard units	
1,1 Dichloroethene	10	µg/L	
1,1 Dichloroethane	10	µg/L	
cis-1,2-dichloroethene	10	µg/L	
Trichloroethene	10	µg/L	
Tetrachloroethene	10	µg/L	
Vinyl Chloride	10	µg/L	
Benzene	5	µg/L	
Ethylbenzene	5	µg/L	
Methylene Chloride	10	µg/L	
1,1,1 Trichloroethane	10	µg/L	
Toluene	5	µg/L	
Methyl-t-Butyl Ether (MTBE)	NA	ug/L	
o-Xylene[2]	5	µg/L	
m, p-Xylene[2]	10	µg/L	
Total Xylenes	NA	ug/L	
Iron, total	600	µg/L	No Sampling Performed
Aluminum	4,000	µg/L	
Copper	48	µg/L	
Lead	11	µg/L	
Manganese	2,000	µg/L	
Silver	100	µg/L	
Vanadium	28	µg/L	
Zinc	230	µg/L	
Total Dissolved Solids	850	mg/L	
Total Suspended Solids	20	mg/L	
Hardness	N/A	mg/L	
Cyanide, Free	10	µg/L	

NOTES:

1. "Daily Maximum" excerpted from Attachment E of Addendum 1 to the Construction Contract Documents dated October 2000.
2. Analytical report did not differentiate between o-Xylene and m, p-Xylene. Total Xylene value reported is given in each line.
3. Shaded cells indicate that analytical value exceeds the "Daily Maximum."
4. "ND" indicates that the compound was not detected and lists the practical quantitation limit in parentheses.
5. "NA" indicates that analyses were not performed and data is unavailable.
6. Average flows based on effluent readings: **No treatment system operations in July 2016.**
7. "J" indicates an estimated value below the detection limit.
8. "B" indicates analyte found in the associated blank.
9. Removed from the required analysis list by NYSDEC Region 9 in February 2005.
10. "NS" indicates that the parameter analysis was not sampled.

40 **Indicates non-compliance with the NYSDEC effluent discharge requirements**
NR **Indicates Not Reported by Lab**

Table 3
Mr. C's Dry Cleaners Site Remediation
NYSDEC Site #915157
July 2016 VOC Analytical Summary

Compound	Based on the July Effluent Analytical Results		
	Influent Concentration* (ug/L)	Effluent Concentration** (ug/L)	Cleanup Efficiency*** (%)
Acetone	No Sampling Performed in July 2016		
Benzene			
2-Butanone			
cis-1, 2-Dichloroethene			
Chloroform			
Chloromethane			
Methylene chloride			
Methyl tert-butyl ether (MTBE)			
Methyl acetate			
Tetrachloroethene (PCE)			
Toluene			
Trichloroethene (TCE)			
Carbon Disulfide			
1,1,2 Trichloro-1,2,2-trifluororethane			
2-Hexanone			
4-Methyl-2-pentanone			
Cyclohexane			
trans-1,2-dichloroethene			
Chlorobenzene			
Methylcyclohexane			
Ethylbenzene			
Methyl acetate			
Vinyl Chloride			
Total Xylenes			
• The 1st progress monitoring sampling of the groundwater wells associated with the "pilot" bioaugmentation program was performed on July 1-2, 2013.	**0.0**	**0.00**	

Notes:
1. "NA" = Not applicable
2. "U" = Compound analyzed, but was not detected. Detection limit in parentheses.
3. "DJ" or "J" indicates an estimated value below the practical quantitation limit but above the method detection limit.
4. Non-detect values are assumed to be equal to zero for calculation of monthly average concentrations.
5. "D" indicates the compound concentration was obtained form a secondary dilution analysis.
6. Acetone was not detected in the influent sample above the MDL but detected in the effluent sample. It is not a contaminant of concern for the Mr. C's site.

* Detection Limits (<10) and (<50)
** Detection Limits (<1) and (<5)
*** Contaminants of Concern only

Attachment A
IEG Summary of Field Activities
July 2016

Mr. C's CLEANERS OM&M

SUMMARY OF FIELD ACTIVITIES BY IEG - 7/2016

DATE	ACTIVITY
2-Jul	Inspect and drain SVE systems as needed. Inspect UEs and MWs. Respond to AutoDialer.
3-Jul	End of month summaries.
7-Jul	Inspect and drain SVE systems as needed. PZ-7D - replace damage bolt. Swept Library Parking Lot. Respond to complaint about hose leaking water.
8-Jul	OM&M office work
14-Jul	Inspect and drain SVE systems as needed. Inspect UEs and MWs. Put up procedure signs in Treatment Room.
21-Jul	Get Supplies
22-Jul	Inspect and drain SVE systems as needed. Inspect UEs and MWs. Replace leaking water hose.
31-Jul	Inspect and drain SVE systems as needed. Inspect Peizometers.

Mr. C's CLEANERS OM&M
STATUS OF FIELD ACTIVITIES BY IEG - 7/2016

ACTIVITY	DESCRIPTION	COMPLETION DATE/STATUS
Trim High Piezometer Risers	Some of the piezometer risers are so high that the riser cap interferes with the top cover. Either the inner ring has sunk or the risers have elevated since installation. Identify problem piezometers (PZ-4D) and trim a small amount off of the riser.	Apr-16
Concrete inside inner ring obstructs Riser Cap	The concrete base inside the inner ring is level with the riser and causing interference with the riser cap. Identify problem piezometers (MPI-1S). Removed concrete adjacent to riser.	Apr-16
Ground around PW-8 has sunk	The ground around PW-8 that was excavated to replace the pit-less adapter has sunk several inches. Add topsoil to level the area and add grass seed/mulch.	Apr-16
PW-4 UE Level	Asphalt around Underground Enclosure has sunk, leaving it vulnerable to damage. Bring parking lot up to level with asphalt patch.	in progress
Rebuild JAC Pump as needed	Jesco America Corp recommends rebuilding the Redux pump when needed. Purchased rebuild kit.	in progress
Brace Effluent Pipe	David Szymanski (NYSDEC) inspected Treatment Room and said that the effluent pipe should be braced in (3) places to the north wall.	in progress
Inspect and clean Manholes	Inspect manholes near operating pumps. Pump out water in manholes and clean out remaining sediment and other material.	in progress
Cool Treatment Room	Temperature in Treatment Room is well above 90 degrees during the summer months. Need to increase outside air inflow to the room.	in progress
Filter Housings are corroded	Flanges that seal filter baskets inside Rosedale Filter Housings are corroded. Sediment flows around filters instead of being trapped. Replace seals in existing housings (short term). Replace housings (long term).	in progress
Replace Air Stripper Latches	Around (6) latches on the Air Stripper trays are loose or broken. Reattach keepers with JB Weld. Replace broken latches and springs with new parts.	in progress
Repair Leaking Ball Valve	Influent ball valve east of EQ Tank drips. Inspect/clean & replace if necessary.	in progress
PZ-1B has damage	PZ-2B has surface concrete damage from severe winter conditions this year. Repair chipped concrete with epoxy material.	in progress
Redux usage rapidly increased	The rate of Redux usage increased rapidly during the past several months despite turning the Jesco Pump settings to their lowest levels. Clean pump and test. Adjust clamps on Redux line. Replace pump if necessary.	in progress
Reduce Influent Pump Rate	Lab Tests have shown high levels of VOCs. Try lengthening the time that the Influent Pump runs to increase the Air Sparging time inside the Air Stripper	in progress
Add Air Sparging System	Lab Tests have shown high levels of VOCs. Try adding an Air Sparging system to the sump box of the Air Stripper to increase the treatment of the effluent.	in progress
South Wall should be sealed	South Wall of Treatment Room has leaked into the neighboring unit several times when there have been water related problems. Trim wall insullation matting to reduce moisture retension. Seal base of wall with silicone caulking.	in progress
SVE Fan pipe collects water	The SVE Fan pipe on Building 586 collects water. There is a plug just below the fan to drain water out of the horizontal section of the pipe. Inspect system and make corrections to prevent the pipe from filling with water.	in progress
Repair PZ-4B	Inner ring of piezometer was severely damaged by Town's snowplow truck. Talked to Town - they will address problem in Spring. Inner ring must be replaced.	in progress
Remove Piezometer Lock	Somepiezometers have padlocks on there riser caps which are defective or no longer have keys. Some of the caps are too tight to put back on the riser properly after removal. Identify problem piezometers (MPI-9SR, MPI-13BR). Remove lock.	May-16
Broken Bolt on PZ-7D	The bolt on this peizometer was bent and then broken by plow trucks during the winter. Tap damaged bracket threads and replace bolt.	Jul-16

Mr. C's CLEANERS OM&M

SUMMARY OF WATER PUMP MAINTENANCE BY IEG - 2016

as of Jul 2016

ID	CLEAN & INSPECT PUMP	REPLACED PUMP	REPAIR PUMP	PITLESS ADAPTER	INNER RING	HORIZONTAL PIPE	CHECK VALVE	CLEAN & INSPECT TRANSDUCER	REPLACE TRANSDUCER	REPLACE ANEROID BELLOWS	PUMP OUT WELL	CLEAN OUT & INSPECT ELECTRICAL BOX	ELECTRICAL BOX REPAIR
RW - 1	Jan 08, May 10, Jan 12, Oct 15	Feb 08, Jan 12	May 10, Nov 08					May 10, Jan 12, Oct 15					
PW - 2	Jun 08, Aug 09, May 10, Apr 13, Sep 15	Jul 08, Apr 13 Dec 15				Sep-15		Nov 11, May 10, Apr 13 Dec 15	Sep 09, Dec 11		Aug-09	Nov-11	Sep-09
PW - 3	Jun 08, Aug 09, May 10, Sep 15	Jul 08, Dec 11, Oct 15		Repair adapter		Sep-15		Aug 09, Nov 11, Oct 15	Dec 11, Sep 15		Aug-09	Nov 11, Sep 15	
PW - 4	Dec 07, May 08, Sep 09, May 10, Jan 12, Oct 15	Dec 07, Jan 12	Sep-13		Aug 13			May 10, Nov 11, Oct 15	Dec 11, Mar 08, Sep 08		Jul 09, Sep 09	Sep 09, Nov 11	Sep-09
PW - 5	Jan 12, May 08, Oct 15	Jul 08, Jan 12						Mar 11, Oct 15	Jan 12, Sep 08			Jan-12	
PW - 6	Jun 08, Jul 09, Jul 12, Nov 12, Aug 15	Jun 08, Jul 09, Aug 12, Nov 12, Sep 15		Replaced Aug 15		Jul 12, Nov 12, Sep 15	Aug 15	Aug 09, Jul 12, Dec 12, Apr 13, Aug 15	Sep 09, Sep 15	Aug 15	Aug-09	Aug 09, Sep 09, Sep 15	Jul 09, Sep 09
PW - 7	Jun 08, Jul 09, May 10, Oct 10, Aug 11, Mar 12, Jul 12, Nov 12, Aug 15	Nov 07, Jul 09, Oct 10, Nov 12		Replaced Aug 15		Jul 12, Nov 12	Aug 15	Oct 10, Aug 11, Mar 12, Jul 12, Dec 12, Aug 15			Aug 09, May 10, Aug 11		
PW - 8	Jun 08, Aug 09, May 10, Aug 11, Jul 12, Dec 12, Aug 15	Jul 08, Sep 09, Aug 11, Dec 12		Replaced Aug 15		Pipe 8/09, Jul 12, Sep 15	Aug 15	May 10, Aug 11, Jul 12, Dec 12, Apr 13, Aug 15		Aug 15	Aug 09, May 10, Aug 11	Apr 13, Aug 15	Apr-13

Mr. C's CLEANERS OM&M

SUMMARY OF WATER PUMP STATUS - 2016

as of Jul 2016

ID	NEEDS CLEANING & INSPECTION	NEEDS NEW PUMP	NEEDS NEW INNER RING	NEEDS P.A. OR PIPE	NEEDS WELL CLEAN-OUT	PITLESS ADAPTER	NEEDS HORIZONTAL LINE PURGE	NEEDS CHECK VALVE INSPECTION	NEEDS TRANSDUCER INSPECTION	NEEDS NEW TRANSDUCER	NEEDS ANEROID BELLOWS	NEEDS U.E. CLEANED	NEEDS U.E. REPAIR
RW-1	NO	NO	PZ-1B		**YES**				NO	NO	NO	NO	YES - bolts
PW-2	NO	NO	NO		**NO**				NO		NO	NO	YES - bolts
PW-3	NO	NO	NO						NO		NO	NO	NO
PW-4	NO	NO	PZ-4B						NO		NO	NO	YES - Asphalt patch
PW-5	NO	NO	NO		YES				NO			NO	NO
PW-6	NO	NO	NO				NO		NO	NO	NO	NO	DONE
PW-7	YES	NO	NO		NO		NO		NO	NO		NO	NO
PW-8	NO	NO	NO		NO		NO		NO	NO	NO	NO	NO

Attachment B
Summary of Site Utility Costs and Projections
January to December 2016

Mr. C's Dry Cleaners Site - Remedial Treatment Utility Costs

ATTACHMENT B

NYSDEC Work Assignment #10C3074.0010.07

12 Months of System Operation and Maintenance

July 2016 Report

Utility Budget:

Electric:	$25,300.00
Telephone:	$540.00
Gas	$1,120.00
Total:	$26,960.00

Gas, Telephone, and Electric

Utility Provider	Account #	E&E Cost Center	Description	Jan-2016	Feb-2016	Mar-2016	Apr-2016	May-2016	Jun-2016	
New York State E&G	1001-0310-422	EN-003229-0001-03TTO	Mr. C's Electric Costs	$ 577.59	$ 762.15	$ 265.95	$ 177.66	$ 188.45	$163.34	
New York State E&G	76-311-11-015900-18									
National Fuel Gas	5819628-05	EN-003229-0001-03TTO	Mr. C's Natural Gas Costs	$ 68.33	$ 4.15	$ 58.82	$ 8.76	$ 24.37	$17.22	
			Totals	**$ 645.92**	**$ 766.30**	**$ 324.77**	**$ 186.42**	**$ 212.82**	**$ 180.56**	

				Jul-2016	Aug-2016	Sep-2016	Oct-2016	Nov-2016	Dec-2016	Ave. /Month
			Mr. C's Electric Costs	$ 175.96						**$ 330.16**
			Mr. C's Natural Gas Costs	$21.17						**$ 28.97**
			Totals	**$197.13**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 359.13**

			Electric - Mr. C's		**$2,311.10**		**Notes:**				
			Natural Gas - Mr. C's		**$ 202.82**			Overbilled natural gas costs - no charges			
			Grand Total - NYSE&G/National Fuel Gas Costs To Date	**$**	**2,513.92**			**Estimated Reading**		$ 333.44	in red -adjusted billing

Phone

Utility Provider	Phone #	E&E Cost Center	Location Description	Jan-2016	Feb-2016	Mar-2016	Apr-2016	May-2016	Jun-2016	
Verizon	716-652-0094	EN-003229-0001-03TTO	Mr. C's Telephone Costs	$ 36.01	$ 36.16	$ 36.16	$ 36.16	$ 40.86		
Account #										
716 652 0094 416 26 2										

				Jul-2016	Aug-2016	Sep-2016	Oct-2016	Nov-2016	Dec-2016	Ave./Month
		EN-003229-0001-03TTO								**$ 37.07**

		Verizon Costs to Date - Mr. C's	**$**	**185.35**	
		Grand Total All Utilities To Date	**$**	**2,699.27**	

Mr. C's Dry Cleaners Site - Remedial Treatment Utility Costs

ATTACHMENT B

NYSDEC Work Assignment #11

12 Months of System Operation and Maintenance

July 2016 Report

	Optimum Operating Hours	Actual Operating Hours	Up-time Percentage	Capacity	Comments:
January-16	672	672	100.00%	9.7%	Very mild winter - very little snow.
February-16	0	0	0.00%	0.0%	System Shutdown
March-16	0	0	0.00%	0.0%	System Shutdown
April-16	0	0	0.00%	0.0%	System Shutdown
May-16	0	0	0.00%	0.0%	System Shutdown
June-16	0	0	0.00%	0.0%	System Shutdown
July-16	0	0	0.00%	0.0%	System Shutdown
August-16			#DIV/0!		
September-16			#DIV/0!		
October-16			#DIV/0!		
November-16			#DIV/0!		
December-16			#DIV/0!		
Totals to Date	**672**	**672**	**100.00%**		

Budget Remaining:

Electric:	**$22,988.90**
Telephone:	**$354.65**
Gas	**$917.18**
Total:	**$24,260.73**

* Percent Capacity is based on initial operating groundwater flows from the eight installed pumps from 9/02. Evaluated on total gallons discharged for monthly operating time.

Maximum pump discharges calculated as an average of 78 gpm as the total for all 8 pumps at the site if all pumps operate 100%. With the exception of groundwater pump RW-1, all others run on a batch basis.

Monthly Average Costs

Mr. C's Electric	**$**	**330.16**			
Agway Electric	**$**	**-**			
Mr. C's Gas	**$**	**28.97**			
Mr. C's Telephone	**$**	**37.07**			
Ave. Utility Cost Total	**$**	**396.20**	**times**	**12 Month Estimate**	**$5,150.62**

ecology and environment engineering, p.c.
International Specialists in the Environment
BUFFALO CORPORATE CENTER
368 Pleasant View Drive
Lancaster, New York 14086
Tel: (716) 684-8060, Fax: (716) 684-0844

September 9, 2016

Mr. William Welling, Project Manager
New York State Department of Environmental Conservation
Division of Environmental Remediation
625 Broadway, 12th Floor
Albany, New York 12233 - 7013

Re: Mr. C's Dry Cleaners Site, Contract # D007617, Site # 915157
August 2016 Operations, Maintenance, and Monitoring Report

Dear Mr. Welling:

Ecology and Environment Engineering, P.C. (EEEPC) is pleased to provide the August 2016 Operations, Maintenance, and Monitoring (OM&M) Report for the Mr. C's Dry Cleaners Site, NYSDEC Site # 915157, located in the Village of East Aurora, New York. A summary of field activities prepared by EEEPC's subcontractor, Iyer Environmental Group, PLLC (IEG), is provided in Attachment A. The site utility information is provided in Attachment B.

Per your request, the Mr. C's treatment system has been shutdown since February 4, 2016 and will continue to be offline until the Remedial Site Optimization (RSO) report is reviewed by the NYSDEC for determination of the future treatment requirements for the site. The revised RSO is to be submitted in mid-September.

No influent/effluent samples were performed during this time as a result of the treatment system shutdown. Monthly water depth measurements are taken at the site's groundwater monitoring wells, piezometers, and pumping wells during this shutdown period by IEG. Groundwater sampling was performed by EEEPC from April 25-May 2, 2016 to evaluate the potential for rebound of the volatile organic compounds around the Mr. C's site. The Groundwater Report was issued on June 16, 2016.

In review of the on-site treatment system operations, monitoring and maintenance for August 2016, EEEPC offers the following comments and highlights:

Operational Summary

Mr. C's Site – Remedial Operations and Maintenance Information

- The August 2016 summary of field activities performed between 8/1/2016 and 9/3/2016 from IEG are provided as Attachment A.
- Drain SVE system at Country Cottage and inspect piezometers.

Subslab Depressurization Systems (SSDS)

- Property owner at 27 Whaley Ave. (David Dubois) has not returned EEEPC's calls for inspection of the SSDS unit. EEEPC will continue to contact to obtain access for inspection.
- Problems were encountered with moisture and freeze up in the fan system at the 586 Main Street "County Cupboard" SSDS unit. The SSDS is under review by GES and EEEPC.
- SSDS installation design at 31 Paine Street is currently in process.
- Discussion of new SSDS unit installation at 23 Paine Street is in progress. EEEPC needs to re-issue letter of determination of SSDS from NYSDOH to the new property owner. The new property owner of 23 Paine Street house as of November 2015 is David Dubois.

Status of Bioremediation Direct Push Injection Work

- Additional review of the recommendations in the summary report to be evaluated with the Remedial Site Optimization (RSO) program.
- The draft RSO was issued to NYSDEC on December 8, 2015.

Soil Vapor Intrusion Investigation Program (2015-2016)

- Discuss new property locations with NYSDEC / NYSDOH for SVII work in 2016.

Site Management Plan

- EEEPC submitted the updated/revised SMP to NYSDEC and NYSDEC Region 9 on March 2, 2015.
- This is an active site document, so future revisions will be performed once major changes to the management of the site are required after optimization evaluation is performed.

Annual Long-term Groundwater Monitoring Well Report

- Report of 2015 annual Groundwater results was issued to NYSDEC on December 21, 2015.
- The 2016 Groundwater sampling/analytical results report was submitted on June 16, 2016.
- Review with the NYSDEC PM if another groundwater sampling / analytical for fall 2016.

Periodic Review Report (PRR)

- The 2015 Periodic Review Report was issued to NYSDEC on January 29, 2015.
- 2016 PRP starting to be prepared.

If you have questions regarding the August 2016 OM&M report summary, please do not hesitate to contact me at 716-684-8060.

Very Truly Yours,
Ecology and Environment Engineering, P. C.

Michael G. Steffan
Project Manager

cc: D. Szymanski, Region 9, NYSDEC - Buffalo w/ attachments
D. Iyer, IEG – w/attachments
CTF - 10C3074.0011.07

Table 1
Mr. C's Dry Cleaners Site Remediation
Site #915157
System Operation and Management

Month	Up-time		Treated Effluent (gallon)	VOC Removal		
	Reporting Hours	Operational Up-time		Influent VOCs (µg/L)	Effluent VOCs(µg/L)	VOCs Removed (lbs.)
(Up-time from 9/5/02 to 01/04/16)	**111,949.50**	**95.23%**	**128,814,819**	**NA**	**NA**	**1,614.16**
January 4, 2016 - February 1, 2016	672	100.00%	305,578	692.0	0.0	1.76
February 1, 2016 - February 29, 2016	0	0.00%	0	0.0	0.0	0.00
March 1, 2016 - March 31, 2016	0	0.00%	0	0.0	0.0	0.00
April 1, 2016 - April 30, 2016	0	0.00%	0	0.0	0.0	0.00
April 31, 2016 - June 1, 2016	0	0.00%	0	0.0	0.0	0.00
June 1, 2016 - June 27, 2016	0	0.00%	0	0.0	0.0	0.00
June 27, 2016 - July 31, 2016	0	0.00%	0	0.0	0.0	0.00
July 31, 2016 - September 3, 2016	0	0.00%	0	0.0	0.0	0.00

Total in 2016	**672.00**	**1.00**	**305,578**	**692.00**	**0.00**	**1.76**
Total from startup	**112,621.50**	**0.95**	**129,120,397.00**	**NA**	**NA**	**1,615.93**

NOTES:

1. Up-time based as percentage of total reporting hours.
2. Treatment system operated by the Tyree Organization Ltd. from 9/02 - 9/03.
3. Treatment system operated by O&M Enterprises Inc. from 10/03 - 7/07.
4. Treatment system operated by Iyer Environmental Group from 7/07 to present.
5. VOC removal calculations are based on monthly water samples and assumes samples are representative of the entire reporting period.
6. VOC removal calculations assume that non-detect values = 0 ug/L.
7. Total VOCs summations include estimated "J" values.
8. VOC removal calculations are based on effluent totalizer readings.
9. "Influent VOCs" and "Effluent VOCs" values given above is the summation of values for individual compounds given in monthly analytical reports.
10. Unit conversion: 1 pound = 453.5924 grams, 1 gallon = 3.785 liters
11. Formula for the VOC removal calculation:

$(VOCs_{Influent} - VOCs_{Effluent})(ug/L) \cdot (1g/10^6 ug) \cdot (1\ lb/453.5924\ g) \cdot (Monthly\ process\ water)(gal) \cdot (3.785\ L/gallon)$

12. Using the 2/2/16 analytical results.

Table 2
Mr. C's Dry Cleaners Site Remediation
Site #915157
Effluent Discharge Criteria & Analytical Compliance Results

Parameter/Analyte	Daily Maximum[1]	Units	August - Effluent Analytical Values - Compliance
Flow (Average)	N/A	gpd	No Sampling Performed
pH	6.0 - 9.0	standard units	
1,1 Dichloroethene	10	µg/L	
1,1 Dichloroethane	10	µg/L	
cis-1,2-dichloroethene	10	µg/L	
Trichloroethene	10	µg/L	
Tetrachloroethene	10	µg/L	
Vinyl Chloride	10	µg/L	
Benzene	5	µg/L	
Ethylbenzene	5	µg/L	
Methylene Chloride	10	µg/L	
1,1,1 Trichloroethane	10	µg/L	
Toluene	5	µg/L	
Methyl-t-Butyl Ether (MTBE)	NA	ug/L	
o-Xylene[2]	5	µg/L	
m, p-Xylene[2]	10	µg/L	
Total Xylenes	NA	ug/L	
Iron, total	600	µg/L	No Sampling Performed
Aluminum	4,000	µg/L	
Copper	48	µg/L	
Lead	11	µg/L	
Manganese	2,000	µg/L	
Silver	100	µg/L	
Vanadium	28	µg/L	
Zinc	230	µg/L	
Total Dissolved Solids	850	mg/L	
Total Suspended Solids	20	mg/L	
Hardness	N/A	mg/L	
Cyanide, Free	10	µg/L	

NOTES:

1. "Daily Maximum" excerpted from Attachment E of Addendum 1 to the Construction Contract Documents dated October 2000.
2. Analytical report did not differentiate between o-Xylene and m, p-Xylene. Total Xylene value reported is given in each line.
3. Shaded cells indicate that analytical value exceeds the "Daily Maximum."
4. "ND" indicates that the compound was not detected and lists the practical quantitation limit in parentheses.
5. "NA" indicates that analyses were not performed and data is unavailable.
6. Average flows based on effluent readings: **No treatment system operations in August 2016.**
7. "J" indicates an estimated value below the detection limit.
8. "B" indicates analyte found in the associated blank.
9. Removed from the required analysis list by NYSDEC Region 9 in February 2005.
10. "NS" indicates that the parameter analysis was not sampled.

40 **Indicates non-compliance with the NYSDEC effluent discharge requirements**
NR **Indicates Not Reported by Lab**

Table 3
Mr. C's Dry Cleaners Site Remediation
NYSDEC Site #915157
August 2016 VOC Analytical Summary

Compound	Based on the July Effluent Analytical Results		
	Influent Concentration* (ug/L)	Effluent Concentration** (ug/L)	Cleanup Efficiency*** (%)
Acetone	No Sampling Performed in August 2016		
Benzene			
2-Butanone			
cis-1, 2-Dichloroethene			
Chloroform			
Chloromethane			
Methylene chloride			
Methyl tert-butyl ether (MTBE)			
Methyl acetate			
Tetrachloroethene (PCE)			
Toluene			
Trichloroethene (TCE)			
Carbon Disulfide			
1,1,2 Trichloro-1,2,2-trifluororethane			
2-Hexanone			
4-Methyl-2-pentanone			
Cyclohexane			
trans-1,2-dichloroethene			
Chlorobenzene			
Methylcyclohexane			
Ethylbenzene			
Methyl acetate			
Vinyl Chloride			
Total Xylenes			
• The 1st progress monitoring sampling of the groundwater wells associated with the "pilot" bioaugmentation program was performed on July 1-2, 2013.	**0.0**	**0.00**	

Notes:
1. "NA" = Not applicable
2. "U" = Compound analyzed, but was not detected. Detection limit in parentheses.
3. "DJ" or "J" indicates an estimated value below the practical quantitation limit but above the method detection limit.
4. Non-detect values are assumed to be equal to zero for calculation of monthly average concentrations.
5. "D" indicates the compound concentration was obtained form a secondary dilution analysis.
6. Acetone was not detected in the influent sample above the MDL but detected in the effluent sample. It is not a contaminant of concern for the Mr. C's site.

* Detection Limits (<10) and (<50)

** Detection Limits (<1) and (<5)

*** Contaminants of Concern only

Attachment A
IEG Summary of Field Activities
August 2016

Mr. C's CLEANERS OM&M

SUMMARY OF FIELD ACTIVITIES BY IEG - 8/2016

DATE	ACTIVITY
2-Aug	End of month summaries. OM&M office work.
7-Aug	Inspect and drain SVE systems as needed. Inspect Peizometers.
16-Aug	Inspect and drain SVE systems as needed. Respond to AutoDialer alarm. Inspect Piezometers.
23-Aug	Inspect and drain SVE systems as needed. Inspect Peizometers.
29-Aug	Inspect and drain SVE systems as needed. Inspect Peizometers.

Mr. C's CLEANERS OM&M
STATUS OF FIELD ACTIVITIES BY IEG - 8/2016

ACTIVITY	DESCRIPTION	COMPLETION DATE/STATUS
PW-4 UE Level	Asphalt around Underground Enclosure has sunk, leaving it vulnerable to damage. Bring parking lot up to level with asphalt patch.	in progress
Rebuild JAC Pump as needed	Jesco America Corp recommends rebuilding the Redux pump when needed. Purchased rebuild kit.	in progress
Brace Effluent Pipe	David Szymanski (NYSDEC) inspected Treatment Room and said that the effluent pipe should be braced in (3) places to the north wall.	in progress
Inspect and clean Manholes	Inspect manholes near operating pumps. Pump out water in manholes and clean out remaining sediment and other material.	in progress
Cool Treatment Room	Temperature in Treatment Room is well above 90 degrees during the summer months. Need to increase outside air inflow to the room.	in progress
Filter Housings are corroded	Flanges that seal filter baskets inside Rosedale Filter Housings are corroded. Sediment flows around filters instead of being trapped. Replace seals in existing housings (short term). Replace housings (long term).	in progress
Replace Air Stripper Latches	Around (6) latches on the Air Stripper trays are loose or broken. Reattach keepers with JB Weld. Replace broken latches and springs with new parts.	in progress
Repair Leaking Ball Valve	Influent ball valve east of EQ Tank drips. Inspect/clean & replace if necessary.	in progress
PZ-1B has damage	PZ-2B has surface concrete damage from severe winter conditions this year. Repair chipped concrete with epoxy material.	in progress
Redux usage rapidly increased	The rate of Redux usage increased rapidly during the past several months despite turning the Jesco Pump settings to their lowest levels. Clean pump and test. Adjust clamps on Redux line. Replace pump if necessary.	in progress
Reduce Influent Pump Rate	Lab Tests have shown high levels of VOCs. Try lengthening the time that the Influent Pump runs to increase the Air Sparging time inside the Air Stripper	in progress
Add Air Sparging System	Lab Tests have shown high levels of VOCs. Try adding an Air Sparging system to the sump box of the Air Stripper to increase the treatment of the effluent.	in progress
South Wall should be sealed	South Wall of Treatment Room has leaked into the neighboring unit several times when there have been water related problems. Trim wall insullation matting to reduce moisture retension. Seal base of wall with silicone caulking.	in progress
SVE Fan pipe collects water	The SVE Fan pipe on Building 586 collects water. There is a plug just below the fan to drain water out of the horizontal section of the pipe. Inspect system and make corrections to prevent the pipe from filling with water.	in progress
Repair PZ-4B	Inner ring of piezometer was severely damaged by Town's snowplow truck. Talked to Town - they will address problem in Spring. Inner ring must be replaced.	in progress
Remove Piezometer Lock	Somepiezometers have padlocks on there riser caps which are defective or no longer have keys. Some of the caps are too tight to put back on the riser properly after removal. Identify problem piezometers (MPI-9SR, MPI-13BR). Remove lock.	May-16
Broken Bolt on PZ-7D	The bolt on this peizometer was bent and then broken by plow trucks during the winter. Tap damaged bracket threads and replace bolt.	Jul-16
EE-4 Paved Over	During the Aug 2016 paving of the north half of the parking lot, Piezometer EE-4 was covered. Locate piezometer and remove asphalt to expose it.	in progress

Mr. C's CLEANERS OM&M

SUMMARY OF WATER PUMP MAINTENANCE BY IEG - 2016

as of Aug 2016

ID	CLEAN & INSPECT PUMP	REPLACED PUMP	REPAIR PUMP	PITLESS ADAPTER	INNER RING	HORIZONTAL PIPE	CHECK VALVE	CLEAN & INSPECT TRANSDUCER	REPLACE TRANSDUCER	REPLACE ANEROID BELLOWS	PUMP OUT WELL	CLEAN OUT & INSPECT ELECTRICAL BOX	ELECTRICAL BOX REPAIR
RW - 1	Jan 08, May 10, Jan 12, Oct 15	Feb 08, Jan 12	May 10, Nov 08					May 10, Jan 12, Oct 15					
PW - 2	Jun 08, Aug 09, May 10, Apr 13, Sep 15	Jul 08, Apr 13 Dec 15				Sep-15		Nov 11, May 10, Apr 13 Dec 15	Sep 09, Dec 11		Aug-09	Nov-11	Sep-09
PW - 3	Jun 08, Aug 09, May 10, Sep 15	Jul 08, Dec 11, Oct 15		Repair adapter		Sep-15		Aug 09, Nov 11, Oct 15	Dec 11, Sep 15		Aug-09	Nov 11, Sep 15	
PW - 4	Dec 07, May 08, Sep 09, May 10, Jan 12, Oct 15	Dec 07, Jan 12	Sep-13		Aug 13			May 10, Nov 11, Oct 15	Dec 11, Mar 08, Sep 08		Jul 09, Sep 09	Sep 09, Nov 11	Sep-09
PW - 5	Jan 12, May 08, Oct 15	Jul 08, Jan 12						Mar 11, Oct 15	Jan 12, Sep 08			Jan-12	
PW - 6	Jun 08, Jul 09, Jul 12, Nov 12, Aug 15	Jun 08, Jul 09, Aug 12, Nov 12, Sep 15		Replaced Aug 15		Jul 12, Nov 12, Sep 15	Aug 15	Aug 09, Jul 12, Dec 12, Apr 13, Aug 15	Sep 09, Sep 15	Aug 15	Aug-09	Aug 09, Sep 09, Sep 15	Jul 09, Sep 09
PW - 7	Jun 08, Jul 09, May 10, Oct 10, Aug 11, Mar 12, Jul 12, Nov 12, Aug 15	Nov 07, Jul 09, Oct 10, Nov 12		Replaced Aug 15		Jul 12, Nov 12	Aug 15	Oct 10, Aug 11, Mar 12, Jul 12, Dec 12, Aug 15			Aug 09, May 10, Aug 11		
PW - 8	Jun 08, Aug 09, May 10, Aug 11, Jul 12, Dec 12, Aug 15	Jul 08, Sep 09, Aug 11, Dec 12		Replaced Aug 15		Pipe 8/09, Jul 12, Sep 15	Aug 15	May 10, Aug 11, Jul 12, Dec 12, Apr 13, Aug 15		Aug 15	Aug 09, May 10, Aug 11	Apr 13, Aug 15	Apr-13

Mr. C's CLEANERS OM&M

SUMMARY OF WATER PUMP STATUS - 2016

as of Aug 2016

ID	NEEDS CLEANING & INSPECTION	NEEDS NEW PUMP	NEEDS NEW INNER RING	NEEDS P.A. OR PIPE	NEEDS WELL CLEAN-OUT	PITLESS ADAPTER	NEEDS HORIZONTAL LINE PURGE	NEEDS CHECK VALVE INSPECTION	NEEDS TRANSDUCER INSPECTION	NEEDS NEW TRANSDUCER	NEEDS ANEROID BELLOWS	NEEDS U.E. CLEANED	NEEDS U.E. REPAIR
RW-1	NO	NO	PZ-1B		**YES**				NO	NO	NO	NO	YES - bolts
PW-2	NO	NO	NO		**NO**				NO		NO	NO	YES - bolts
PW-3	NO	NO	NO						NO		NO	NO	NO
PW-4	NO	NO	PZ-4B						NO		NO	NO	YES - Asphalt patch
PW-5	NO	NO	NO		YES				NO			NO	NO
PW-6	NO	NO	NO				NO		NO	NO	NO	NO	DONE
PW-7	YES	NO	NO		NO		NO		NO	NO		NO	NO
PW-8	NO	NO	NO		NO		NO		NO	NO	NO	NO	NO

Attachment B
Summary of Site Utility Costs and Projections
January to December 2016

Mr. C's Dry Cleaners Site - Remedial Treatment Utility Costs

ATTACHMENT B

NYSDEC Work Assignment #10C3074.0010.07

12 Months of System Operation and Maintenance

August 2016 Report

Utility Budget:

Electric:	$25,300.00
Telephone:	$540.00
Gas	$1,120.00
Total:	$26,960.00

Gas, Telephone, and Electric

Utility Provider	Account #	E&E Cost Center	Description	Jan-2016	Feb-2016	Mar-2016	Apr-2016	May-2016	Jun-2016
New York State E&G	1001-0310-422	EN-003229-0001-03TTO	Mr. C's Electric Costs	$ 577.59	$ 762.15	$ 265.95	$ 177.66	$ 188.45	$163.34
New York State E&G	76-311-11-015900-18								
National Fuel Gas	5819628-05	EN-003229-0001-03TTO	Mr. C's Natural Gas Costs	$ 68.33	$ 4.15	$ 58.82	$ 8.76	$ 24.37	$17.22
			Totals	**$ 645.92**	**$ 766.30**	**$ 324.77**	**$ 186.42**	**$ 212.82**	**$ 180.56**

	Jul-2016	Aug-2016	Sep-2016	Oct-2016	Nov-2016	Dec-2016	Ave. /Month
Mr. C's Electric Costs	$ 175.96	$ 194.31	$ 20.42				**$ 280.65**
Mr. C's Natural Gas Costs	$21.17						**$ 28.97**
Totals	**$197.13**	**$ 194.31**	**$ 20.42**	**$ -**	**$ -**	**$ -**	**$ 309.62**

Electric - Mr. C's $2,525.83

Natural Gas - Mr. C's $ 202.82

Notes: Overbilled natural gas costs - no charges

Grand Total - NYSE&G/National Fuel Gas Costs To Date $ 2,728.65

Estimated Reading $ 333.44 in red -adjusted billing

Phone

Utility Provider	Phone #	E&E Cost Center	Location Description	Jan-2016	Feb-2016	Mar-2016	Apr-2016	May-2016	Jun-2016
Verizon	716-652-0094	EN-003229-0001-03TTO	Mr. C's Telephone Costs	$ 36.01	$ 36.16	$ 36.16	$ 36.16	$ 40.86	
Account #									
716 652 0094 416 26 2									

	Jul-2016	Aug-2016	Sep-2016	Oct-2016	Nov-2016	Dec-2016	Ave./Month
EN-003229-0001-03TTO							**$ 37.07**

Verizon Costs to Date - Mr. C's $ 185.35

Grand Total All Utilities To Date $ 2,914.00

Mr. C's Dry Cleaners Site - Remedial Treatment Utility Costs

ATTACHMENT B

NYSDEC Work Assignment #11

12 Months of System Operation and Maintenance

August 2016 Report

Budget Remaining:

Electric:	**$22,774.17**
Telephone:	**$354.65**
Gas	**$917.18**
Total:	**$24,046.00**

	Optimum Operating Hours	Actual Operating Hours	Up-time Percentage	Capacity	Comments:
January-16	672	672	100.00%	9.7%	Very mild winter - very little snow.
February-16	0	0	0.00%	0.0%	System Shutdown
March-16	0	0	0.00%	0.0%	System Shutdown
April-16	0	0	0.00%	0.0%	System Shutdown
May-16	0	0	0.00%	0.0%	System Shutdown
June-16	0	0	0.00%	0.0%	System Shutdown
July-16	0	0	0.00%	0.0%	System Shutdown
August-16	0	0	0.00%	0.0%	System Shutdown
September-16			#DIV/0!		
October-16			#DIV/0!		
November-16			#DIV/0!		
December-16			#DIV/0!		
Totals to Date	**672**	**672**	**100.00%**		

* Percent Capacity is based on initial operating groundwater flows from the eight installed pumps from 9/02. Evaluated on total gallons discharged for monthly operating time.

Maximum pump discharges calculated as an average of 78 gpm as the total for all 8 pumps at the site if all pumps operate 100%. With the exception of groundwater pump RW-1, all others run on a batch basis.

Monthly Average Costs

Mr. C's Electric	**$**	**280.65**			
Agway Electric	**$**	**-**			
Mr. C's Gas	**$**	**28.97**			
Mr. C's Telephone	**$**	**37.07**			
Ave. Utility Cost Total	**$**	**346.69**	**times**	**12 Month Estimate**	**$4,507.00**

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BUFFALO CORPORATE CENTER
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October 11, 2016

Mr. William Welling, Project Manager
New York State Department of Environmental Conservation
Division of Environmental Remediation
625 Broadway, 12th Floor
Albany, New York 12233 - 7013

Re: Mr. C's Dry Cleaners Site, Contract # D007617, Site # 915157
September 2016 Operations, Maintenance, and Monitoring Report

Dear Mr. Welling:

Ecology and Environment Engineering, P.C. (EEEPC) is pleased to provide the September 2016 Operations, Maintenance, and Monitoring (OM&M) Report for the Mr. C's Dry Cleaners Site, NYSDEC Site # 915157, located in the Village of East Aurora, New York. A summary of field activities prepared by EEEPC's subcontractor, Iyer Environmental Group, PLLC (IEG), is provided in Attachment A. The site utility information is provided in Attachment B.

Per your request, the Mr. C's treatment system has been shutdown since February 4, 2016. The revised RSO was submitted September 23, 2016. Per our conversations, restart of the treatment system is expected the second week of October 2016. IEG will review the pumping systems and the treatment operations before startup.

No influent/effluent samples were performed during this time as a result of the treatment system shutdown. Monthly water depth measurements are taken at the site's groundwater monitoring wells, piezometers, and pumping wells during this shutdown period by IEG. Groundwater sampling was performed by EEEPC from April 25-May 2, 2016 to evaluate the potential for rebound of the volatile organic compounds around the Mr. C's site. The 2016 Groundwater Report was issued on June 16, 2016.

In review of the on-site treatment system operations, monitoring and maintenance for September 2016, EEEPC offers the following comments and highlights:

Operational Summary

Mr. C's Site – Remedial Operations and Maintenance Information

- The September 2016 summary of field activities performed between 9/3/2016 and 9/27/2016 from IEG are provided as Attachment A.
- Drain SVE system at Country Cottage and inspect piezometers.

Mr. C's Site – Remedial Operations and Maintenance Information (con't.)

- Performed repairs on PZ-1B, PZ-6A and PZ-6B.

Subslab Depressurization Systems (SSDS).

- Property owner at 27 Whaley Ave. (David Dubois) has not returned EEEPC's calls for inspection of the SSDS unit. EEEPC will continue to contact to obtain access for inspection.
- SSDS installation design at 31 Paine Street is currently in process.
- Discussion of new SSDS unit installation at 23 Paine Street is in progress. EEEPC needs to re-issue letter of determination of SSDS from NYSDOH to the new property owner. The new property owner of 23 Paine Street house as of November 2015 is David Dubois.

Status of Bioremediation Direct Push Injection Work.

- Additional review of the recommendations in the summary report to be evaluated with the Remedial Site Optimization (RSO) program.
- The Final RSO was issued to NYSDEC on September 23, 2016.

Soil Vapor Intrusion Investigation Program (2016)

- Discuss new property locations with NYSDEC / NYSDOH for SVII work in 2016.

Site Management Plan

- EEEPC submitted the updated/revised SMP to NYSDEC and NYSDEC Region 9 on March 2, 2015.
- This is an active site document, so future revisions will be performed once major changes to the management of the site are required after optimization evaluation is performed.

Annual Long-term Groundwater Monitoring Well Report

- Report of 2015 annual Groundwater results was issued to NYSDEC on December 21, 2015.
- The 2016 Groundwater sampling/analytical results report was submitted on June 16, 2016.
- Review with the NYSDEC PM if another groundwater sampling / analytical for fall 2016 was necessary. This was discussed and will not be necessary to perform at this time.

Periodic Review Report (PRR)

- 2016 PRP starting to be prepared.

If you have questions regarding the September 2016 OM&M report summary, please do not hesitate to contact me at 716-684-8060.

Very Truly Yours,
Ecology and Environment Engineering, P. C.

Michael G. Steffan
Project Manager

cc: D. Szymanski, Region 9, NYSDEC - Buffalo w/ attachments
D. Iyer, IEG – w/attachments
CTF - 10C3074.0011.07

Table 1
Mr. C's Dry Cleaners Site Remediation
Site #915157
System Operation and Management

Month	Up-time		Treated Effluent (gallon)	VOC Removal		
	Reporting Hours	Operational Up-time		Influent VOCs (µg/L)	Effluent VOCs(µg/L)	VOCs Removed (lbs.)
(Up-time from 9/5/02 to 01/04/16)	**111,949.50**	**95.23%**	**128,814,819**	**NA**	**NA**	**1,614.16**
January 4, 2016 - February 1, 2016	672	100.00%	305,578	692.0	0.0	1.76
February 1, 2016 - February 29, 2016	0	0.00%	0	0.0	0.0	0.00
March 1, 2016 - March 31, 2016	0	0.00%	0	0.0	0.0	0.00
April 1, 2016 - April 30, 2016	0	0.00%	0	0.0	0.0	0.00
April 31, 2016 - June 1, 2016	0	0.00%	0	0.0	0.0	0.00
June 1, 2016 - June 27, 2016	0	0.00%	0	0.0	0.0	0.00
June 27, 2016 - July 31, 2016	0	0.00%	0	0.0	0.0	0.00
July 31, 2016 - September 3, 2016	0	0.00%	0	0.0	0.0	0.00
September 3, 2016 - September 27, 2016	0	0.00%	0	0.0	0.0	0.00

Total in 2016	**672.00**	**1.00**	**305,578**	**692.00**	**0.00**	**1.76**
Total from startup	**112,621.50**	**0.95**	**129,120,397.00**	**NA**	**NA**	**1,615.93**

NOTES:

1. Up-time based as percentage of total reporting hours.
2. Treatment system operated by the Tyree Organization Ltd. from 9/02 - 9/03.
3. Treatment system operated by O&M Enterprises Inc. from 10/03 - 7/07.
4. Treatment system operated by Iyer Environmental Group from 7/07 to present.
5. VOC removal calculations are based on monthly water samples and assumes samples are representative of the entire reporting period.
6. VOC removal calculations assume that non-detect values = 0 ug/L.
7. Total VOCs summations include estimated "J" values.
8. VOC removal calculations are based on effluent totalizer readings.
9. "Influent VOCs" and "Effluent VOCs" values given above is the summation of values for individual compounds given in monthly analytical reports.
10. Unit conversion: 1 pound = 453.5924 grams, 1 gallon = 3.785 liters
11. Formula for the VOC removal calculation:

$(VOCs_{Influent} - VOCs_{Effluent})(ug/L) \cdot (1g/10^6 ug) \cdot (1\ lb/453.5924\ g) \cdot (Monthly\ process\ water)(gal) \cdot (3.785\ L/gallon)$

12. Using the 2/2/16 analytical results.

Table 2
Mr. C's Dry Cleaners Site Remediation
Site #915157
Effluent Discharge Criteria & Analytical Compliance Results

Parameter/Analyte	Daily Maximum[1]	Units	September - Effluent Analytical Values - Compliance
Flow (Average)	N/A	gpd	No Sampling Performed
pH	6.0 - 9.0	standard units	
1,1 Dichloroethene	10	µg/L	
1,1 Dichloroethane	10	µg/L	
cis-1,2-dichloroethene	10	µg/L	
Trichloroethene	10	µg/L	
Tetrachloroethene	10	µg/L	
Vinyl Chloride	10	µg/L	
Benzene	5	µg/L	
Ethylbenzene	5	µg/L	
Methylene Chloride	10	µg/L	
1,1,1 Trichloroethane	10	µg/L	
Toluene	5	µg/L	
Methyl-t-Butyl Ether (MTBE)	NA	ug/L	
o-Xylene[2]	5	µg/L	
m, p-Xylene[2]	10	µg/L	
Total Xylenes	NA	ug/L	
Iron, total	600	µg/L	No Sampling Performed
Aluminum	4,000	µg/L	
Copper	48	µg/L	
Lead	11	µg/L	
Manganese	2,000	µg/L	
Silver	100	µg/L	
Vanadium	28	µg/L	
Zinc	230	µg/L	
Total Dissolved Solids	850	mg/L	
Total Suspended Solids	20	mg/L	
Hardness	N/A	mg/L	
Cyanide, Free	10	µg/L	

NOTES:

1. "Daily Maximum" excerpted from Attachment E of Addendum 1 to the Construction Contract Documents dated October 2000.
2. Analytical report did not differentiate between o-Xylene and m, p-Xylene. Total Xylene value reported is given in each line.
3. Shaded cells indicate that analytical value exceeds the "Daily Maximum."
4. "ND" indicates that the compound was not detected and lists the practical quantitation limit in parentheses.
5. "NA" indicates that analyses were not performed and data is unavailable.
6. Average flows based on effluent readings: **No treatment system operations in September 2016.**
7. "J" indicates an estimated value below the detection limit.
8. "B" indicates analyte found in the associated blank.
9. Removed from the required analysis list by NYSDEC Region 9 in February 2005.
10. "NS" indicates that the parameter analysis was not sampled.

40 **Indicates non-compliance with the NYSDEC effluent discharge requirements**
NR **Indicates Not Reported by Lab**

Table 3
Mr. C's Dry Cleaners Site Remediation
NYSDEC Site #915157
September 2016 VOC Analytical Summary

Compound	Based on the September Effluent Analytical Results		
	Influent Concentration* (ug/L)	Effluent Concentration** (ug/L)	Cleanup Efficiency*** (%)
Acetone	No Sampling Performed in September 2016		
Benzene			
2-Butanone			
cis-1, 2-Dichloroethene			
Chloroform			
Chloromethane			
Methylene chloride			
Methyl tert-butyl ether (MTBE)			
Methyl acetate			
Tetrachloroethene (PCE)			
Toluene			
Trichloroethene (TCE)			
Carbon Disulfide			
1,1,2 Trichloro-1,2,2-trifluororethane			
2-Hexanone			
4-Methyl-2-pentanone			
Cyclohexane			
trans-1,2-dichloroethene			
Chlorobenzene			
Methylcyclohexane			
Ethylbenzene			
Methyl acetate			
Vinyl Chloride			
Total Xylenes			
• The 1st progress monitoring sampling of the groundwater wells associated with the "pilot" bioaugmentation program was performed on July 1-2, 2013.	**0.0**	**0.00**	

Notes:
1. "NA" = Not applicable
2. "U" = Compound analyzed, but was not detected. Detection limit in parentheses.
3. "DJ" or "J" indicates an estimated value below the practical quantitation limit but above the method detection limit.
4. Non-detect values are assumed to be equal to zero for calculation of monthly average concentrations.
5. "D" indicates the compound concentration was obtained form a secondary dilution analysis.
6. Acetone was not detected in the influent sample above the MDL but detected in the effluent sample. It is not a contaminant of concern for the Mr. C's site.

* Detection Limits (<10) and (<50)
** Detection Limits (<1) and (<5)
*** Contaminants of Concern only

Attachment A
IEG Summary of Field Activities
September 2016

Mr. C's CLEANERS OM&M

SUMMARY OF FIELD ACTIVITIES BY IEG - 9/2016

DATE	ACTIVITY
7-Sep	Inspect and drain SVE systems as needed. Inspect Peizometers.
8-Sep	End of month summaries. OM&M office work.
13-Sep	Inspect and drain SVE systems as needed. Inspect Peizometers. Swept spruce cones and needles off of Library Parking Lot.
14-Sep	Research maintenance project. Drop off materials.
15-Sep	Get supplies. Drop off materials. Repair PZ-1B.
16-Sep	Get supplies. Drop off tools and materials. Repair PZ-6A and PZ-6B.
19-Sep	Inspect and drain SVE systems as needed. Inspect Peizometers. Get supplies. OM&M office work. Instal braces on Effluent Pipe.
22-Sep	OM&M office work
27-Sep	Inspect and drain SVE systems as needed. Inspect Peizometers. OM&M office work.

Mr. C's CLEANERS OM&M
STATUS OF FIELD ACTIVITIES BY IEG - 9/2016

ACTIVITY	DESCRIPTION	COMPLETION DATE/STATUS
Brace Effluent Pipe	David Szymanski (NYSDEC) inspected Treatment Room and said that the effluent pipe should be braced in (3) places to the north wall.	Sep-16
PZ-1B has damage	PZ-2B has surface concrete damage from severe winter conditions this year. Repair chipped concrete with epoxy material.	Sep-16
PZ-6A and PZ-6B have concrete damage	PZ-6A and PZ-6B have concrete damage from snowplowing. Repair damaged concrete with epoxy material.	Sep-16
PW-4 UE Level	Asphalt around Underground Enclosure has sunk, leaving it vulnerable to damage. Bring parking lot up to level with asphalt patch.	in progress
Rebuild JAC Pump as needed	Jesco America Corp recommends rebuilding the Redux pump when needed. Purchased rebuild kit.	in progress
Inspect and clean Manholes	Inspect manholes near operating pumps. Pump out water in manholes and clean out remaining sediment and other material.	in progress
Cool Treatment Room	Temperature in Treatment Room is well above 90 degrees during the summer months. Need to increase outside air inflow to the room.	in progress
Filter Housings are corroded	Flanges that seal filter baskets inside Rosedale Filter Housings are corroded. Sediment flows around filters instead of being trapped. Replace seals in existing housings and patch as needed (short term). Replace housings (long term).	in progress
Replace Air Stripper Latches	Around (6) latches on the Air Stripper trays are loose or broken. Reattach keepers with JB Weld. Replace broken latches and springs with new parts.	in progress
Repair Leaking Ball Valve	Influent ball valve east of EQ Tank drips. Inspect/clean & replace if necessary.	in progress
Redux usage rapidly increased	The rate of Redux usage increased rapidly during the past several months despite turning the Jesco Pump settings to their lowest levels. Clean pump and test. Adjust clamps on Redux line. Replace pump if necessary.	in progress
Reduce Influent Pump Rate	Lab Tests have shown high levels of VOCs. Try lengthening the time that the Influent Pump runs to increase the Air Sparging time inside the Air Stripper	in progress
Add Air Sparging System	Lab Tests have shown high levels of VOCs. Try adding an Air Sparging system to the sump box of the Air Stripper to increase the treatment of the effluent.	in progress
South Wall should be sealed	South Wall of Treatment Room has leaked into the neighboring unit several times when there have been water related problems. Trim wall insullation matting to reduce moisture retension. Seal base of wall with silicone caulking.	in progress
SVE Fan pipe collects water	The SVE Fan pipe on Building 586 collects water. There is a plug just below the fan to drain water out of the horizontal section of the pipe. Inspect system and make corrections to prevent the pipe from filling with water.	in progress
Repair PZ-4B	Inner ring of piezometer was severely damaged by Town's snowplow truck. Talked to Town - they will address problem in Spring. Inner ring must be replaced.	in progress
EE-4 Paved Over	During the Aug 2016 paving of the north half of the parking lot, Piezometer EE-4 was covered. Locate piezometer and remove asphalt to expose it.	in progress
Product in PZ-7D	During Winter 2016 Piezometer Readings product was found in PZ-7D. Remove product to prevent spread.	in progress
Instal Liquid Containment Trench	Southeast section of Treatment Room experienced several water leaks in the past. A shallow trench will be cut into floor slab to direct slow leaks into sump box.	in progress

Mr. C's CLEANERS OM&M

SUMMARY OF WATER PUMP MAINTENANCE BY IEG - 2016

as of Sep 2016

ID	CLEAN & INSPECT PUMP	REPLACED PUMP	REPAIR PUMP	PITLESS ADAPTER	INNER RING	HORIZONTAL PIPE	CHECK VALVE	CLEAN & INSPECT TRANSDUCER	REPLACE TRANSDUCER	PUMP OUT WELL	PIEZOMETERS	REPLACE ANEROID BELLOWS	CLEAN OUT & INSPECT ELECTRICAL BOX	ELECTRICAL BOX REPAIR
RW - 1	Jan 08, May 10, Jan 12, Oct 15	Feb 08, Jan 12	May 10, Nov 08					May 10, Jan 12, Oct 15			PZ-1B repaired Sep 16			
PW - 2	Jun 08, Aug 09, May 10, Apr 13, Sep 15	Jul 08, Apr 13 Dec 15				Sep-15		Nov 11, May 10, Apr 13 Dec 15	Sep 09, Dec 11	Aug-09			Nov-11	Sep-09
PW - 3	Jun 08, Aug 09, May 10, Sep 15	Jul 08, Dec 11, Oct 15		Repair adapter		Sep-15		Aug 09, Nov 11, Oct 15	Dec 11, Sep 15	Aug-09			Nov 11, Sep 15	
PW - 4	Dec 07, May 08, Sep 09, May 10, Jan 12, Oct 15	Dec 07, Jan 12	Sep-13		Aug 13			May 10, Nov 11, Oct 15	Dec 11, Mar 08, Sep 08	Jul 09, Sep 09	PZ-4B replaced Sep 16		Sep 09, Nov 11	Sep-09
PW - 5	Jan 12, May 08, Oct 15	Jul 08, Jan 12						Mar 11, Oct 15	Jan 12, Sep 08				Jan-12	
PW - 6	Jun 08, Jul 09, Jul 12, Nov 12, Aug 15	Jun 08, Jul 09, Aug 12, Nov 12, Sep 15		Replaced Aug 15		Jul 12, Nov 12, Sep 15	Aug 15	Aug 09, Jul 12, Dec 12, Apr 13, Aug 15	Sep 09, Sep 15	Aug-09	PZ-6A, PZ-6C repaired Sep 16	Aug 15	Aug 09, Sep 09, Sep 15	Jul 09, Sep 09
PW - 7	Jun 08, Jul 09, May 10, Oct 10, Aug 11, Mar 12, Jul 12, Nov 12, Aug 15	Nov 07, Jul 09, Oct 10, Nov 12		Replaced Aug 15		Jul 12, Nov 12	Aug 15	Oct 10, Aug 11, Mar 12, Jul 12, Dec 12, Aug 15		Aug 09, May 10, Aug 11				
PW - 8	Jun 08, Aug 09, May 10, Aug 11, Jul 12, Dec 12, Aug 15	Jul 08, Sep 09, Aug 11, Dec 12		Replaced Aug 15		Pipe 8/09, Jul 12, Sep 15	Aug 15	May 10, Aug 11, Jul 12, Dec 12, Apr 13, Aug 15		Aug 09, May 10, Aug 11		Aug 15	Apr 13, Aug 15	Apr-13

Mr. C's CLEANERS OM&M

SUMMARY OF WATER PUMP STATUS - 2016

as of Sep 2016

ID	NEEDS CLEANING & INSPECTION	NEEDS NEW PUMP	NEEDS NEW INNER RING	NEEDS P.A. OR PIPE	NEEDS WELL CLEAN-OUT	PITLESS ADAPTER	NEEDS HORIZONTAL LINE PURGE	NEEDS CHECK VALVE INSPECTION	NEEDS TRANSDUCER INSPECTION	NEEDS NEW TRANSDUCER	NEEDS ANEROID BELLOWS	NEEDS U.E. CLEANED	NEEDS U.E. REPAIR
RW-1	NO	NO	PZ-1B		**YES**				NO	NO	NO	NO	YES - bolts
PW-2	NO	NO	NO		**NO**				NO		NO	NO	YES - bolts
PW-3	NO	NO	NO						NO		NO	NO	NO
PW-4	YES		NO						NO		NO	NO	YES - Asphalt patch
PW-5	NO	NO	NO		YES				NO			NO	NO
PW-6	NO	NO	NO				NO		NO	NO	NO	NO	DONE
PW-7	YES	NO	NO		NO		NO		NO	NO		NO	NO
PW-8	NO	NO	NO		NO		NO		NO	NO	NO	NO	NO

Attachment B
Summary of Site Utility Costs and Projections
January to December 2016

Mr. C's Dry Cleaners Site - Remedial Treatment Utility Costs

ATTACHMENT B

NYSDEC Work Assignment #10C3074.0010.07

12 Months of System Operation and Maintenance

September 2016 Report

Utility Budget:	
Electric:	$25,300.00
Telephone:	$540.00
Gas	$1,120.00
Total:	$26,960.00

Gas, Telephone, and Electric

Utility Provider	Account #	E&E Cost Center	Description	Jan-2016	Feb-2016	Mar-2016	Apr-2016	May-2016	Jun-2016	
New York State E&G	1001-0310-422	EN-003229-0001-03TTO	Mr. C's Electric Costs	$ 577.59	$ 762.15	$ 265.95	$ 177.66	$ 188.45	$163.34	
New York State E&G	76-311-11-015900-18									
National Fuel Gas	5819628-05	EN-003229-0001-03TTO	Mr. C's Natural Gas Costs	$ 68.33	$ 4.15	$ 58.82	$ 8.76	$ 24.37	$17.22	
			Totals	**$ 645.92**	**$ 766.30**	**$ 324.77**	**$ 186.42**	**$ 212.82**	**$ 180.56**	

				Jul-2016	Aug-2016	Sep-2016	Oct-2016	Nov-2016	Dec-2016	Ave. /Month
			Mr. C's Electric Costs	$ 175.96	$ 194.31	$ 20.42	$ 198.23			$ 272.41
			Mr. C's Natural Gas Costs	$21.17						$ 28.97
			Totals	**$197.13**	**$ 194.31**	**$ 20.42**	**$ 198.23**	**$ -**	**$ -**	**$ 301.38**

			Electric - Mr. C's		**$2,724.06**		**Notes:**				
			Natural Gas - Mr. C's		**$ 202.82**			Overbilled natural gas costs - no charges			
		Grand Total - NYSE&G/National Fuel Gas Costs To Date		**$**	**2,926.88**			**Estimated Reading**		$ 333.44	in red -adjusted billing

Phone

Utility Provider	Phone #	E&E Cost Center	Location Description	Jan-2016	Feb-2016	Mar-2016	Apr-2016	May-2016	Jun-2016	
Verizon	716-652-0094	EN-003229-0001-03TTO	Mr. C's Telephone Costs	$ 36.01	$ 36.16	$ 36.16	$ 36.16	$ 40.86	$ 36.41	
Account #										
716 652 0094 416 26 2										

				Jul-2016	Aug-2016	Sep-2016	Oct-2016	Nov-2016	Dec-2016	Ave./Month
		EN-003229-0001-03TTO		$ 37.21	$ 21.09					$ 35.01

	Verizon Costs to Date - Mr. C's	**$**	**280.06**
	Grand Total All Utilities To Date	**$**	**3,206.94**

Mr. C's Dry Cleaners Site - Remedial Treatment Utility Costs

ATTACHMENT B

NYSDEC Work Assignment #11

12 Months of System Operation and Maintenance

September 2016 Report

	Optimum Operating Hours	Actual Operating Hours	Up-time Percentage	Capacity	Comments:
January-16	672	672	100.00%	9.7%	Very mild winter - very little snow.
February-16	0	0	0.00%	0.0%	System Shutdown
March-16	0	0	0.00%	0.0%	System Shutdown
April-16	0	0	0.00%	0.0%	System Shutdown
May-16	0	0	0.00%	0.0%	System Shutdown
June-16	0	0	0.00%	0.0%	System Shutdown
July-16	0	0	0.00%	0.0%	System Shutdown
August-16	0	0	0.00%	0.0%	System Shutdown
September-16	0	0	0.00%	0.0%	System Shutdown
October-16	0	0	0.00%	0.0%	System Shutdown
November-16			#DIV/0!		
December-16			#DIV/0!		
Totals to Date	**672**	**672**	**100.00%**		

Budget Remaining:

Electric:	**$22,575.94**
Telephone:	**$259.94**
Gas	**$917.18**
Total:	**$23,753.06**

* Percent Capacity is based on initial operating groundwater flows from the eight installed pumps from 9/02. Evaluated on total gallons discharged for monthly operating time.
Maximum pump discharges calculated as an average of 78 gpm as the total for all 8 pumps at the site if all pumps operate 100%. With the exception of groundwater pump RW-1, all others run on a batch basis.

Monthly Average Costs

Mr. C's Electric	**$**	**272.41**			
Agway Electric	**$**	**-**			
Mr. C's Gas	**$**	**28.97**			
Mr. C's Telephone	**$**	**35.01**			
Ave. Utility Cost Total	**$**	**336.39**	**times**	**12 Month Estimate**	**$4,373.04**

ecology and environment engineering, p.c.
International Specialists in the Environment
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November 10, 2016

Mr. William Welling, Project Manager
New York State Department of Environmental Conservation
Division of Environmental Remediation
625 Broadway, 12th Floor
Albany, New York 12233 - 7013

Re: Mr. C's Dry Cleaners Site, Contract # D007617, Site # 915157
October 2016 Operations, Maintenance, and Monitoring Report

Dear Mr. Welling:

Ecology and Environment Engineering, P.C. (EEEPC) is pleased to provide the October 2016 Operations, Maintenance, and Monitoring (OM&M) Report for the Mr. C's Dry Cleaners Site, NYSDEC Site # 915157, located in the Village of East Aurora, New York. A summary of field activities prepared by EEEPC's subcontractor, Iyer Environmental Group, PLLC (IEG), is provided in Attachment A. The treatment system was re-actived as a result of the recommendations of the remedial Site Optimization plan. Selected pages from the individual analytical data package prepared by Spectrum Analytical Inc. (SAI), Warwick, Rhode Island are provided as Attachment B. The site utility information is provided in Attachment C.

Per your request, the Mr. C's treatment system has been shutdown since February 4, 2016. The revised RSO was submitted September 23, 2016. Per our conversations, restart of the treatment system was restarted October 6, 2016. IEG performed review the pumping systems and the treatment operations before startup. As a result of the final RSO document, a proposed pulsing plan was submitted to NYSDEC on October 31, 2016. The written plan was developed to optimize the system through a schedule phased and pulsed operations to confirm that asymptotic groundwater conditions have been met to support treatment system shutdown.

Influent/effluent samples were taken on October 26, 2016. Monthly water depth measurements are taken at the site's groundwater monitoring wells, piezometers, and pumping wells during October by IEG (Attachment A).

Groundwater sampling was performed by EEEPC from April 25-May 2, 2016 to evaluate the potential for rebound of the volatile organic compounds around the Mr. C's site. The 2016 Groundwater Report was issued on June 16, 2016.

In review of the on-site treatment system operations, monitoring and maintenance for September 2016, EEEPC offers the following comments and highlights:

Operational Summary

- The monthly checklists for system inspections from IEG are provided as Attachment A for 10/6/16, 10/17/16, and 10/31/16.
- Based on inspection reports prepared by IEG, the remedial treatment system for the period above had a 100% operational up-time (Table 1) and the treatment of contaminated groundwater during that period totaling of 259,917 gallons (Table 1) for October 2016.
- The compliance samples were taken on October 26, 2016 (Attachment B) and the preliminary analytical results were received from SAI on November 2, 2016. The results indicated effluent discharges are in compliance with the SPDES Equivalency permit requirements. The results are provided in the Table 2.
- The analytical summary results of the October 2016 samples revealed the total volatile organic contaminant concentrations of the influent to be 498 µg/L or 498 ppb. In review of the effluent concentrations the results were 12.2 µg/L or 12.2 ppb. The summary of influent and effluent contaminant concentrations for the October 2016 sampling is presented in Table 1.
- The Mr. C's treatment system based on the total monthly flows removed 1.05 lbs. of targeted contaminants from the groundwater below the site in the month of October 2016 and the cleanup effectiveness was 97.5%. The calculations and data for the month are presented in Table 3.

Mr. C's Site – Remedial Operations and Maintenance Information

- The October 2016 summary of field activities performed between 10/6/2016 and 10/31/2016 from IEG are provided as Attachment A.
- Performed repairs on concrete pads around some of the pumping wells.
- Performed maintenance on slow leaking after restart on the bag filter unit and the air stripper trays.
- Cleaned and inspected the pumping wells pumps in anticipation of system startup.
- Drained condensate from two of the active SVE systems.

Subslab Depressurization Systems (SSDS).

- Property owner at 27 Whaley Ave. (David Dubois) has not returned EEEPC's calls for inspection of the SSDS unit. EEEPC will continue to contact to obtain access for inspection.
- SSDS installation design at 31 Paine Street is currently in process.
- Discussion of new SSDS unit installation at 23 Paine Street is in progress. EEEPC needs to re-issue letter of determination of SSDS from NYSDOH to the new property owner. The new property owner of 23 Paine Street house as of November 2015 is David Dubois.

Status of Bioremediation Direct Push Injection Work.

- Additional review of the recommendations in the summary report to be evaluated with the Remedial Site Optimization (RSO) program.
- The Final RSO was issued to NYSDEC on September 23, 2016.

Soil Vapor Intrusion Investigation Program (2016)

- Discuss new property locations with NYSDEC / NYSDOH for SVII work in 2016.

Site Management Plan

- EEEPC submitted the updated/revised SMP to NYSDEC and NYSDEC Region 9 on March 2, 2015.
- This is an active site document, so future revisions will be performed once major changes to the management of the site are required after optimization evaluation is performed.

Annual Long-term Groundwater Monitoring Well Report

- Report of 2015 annual Groundwater results was issued to NYSDEC on December 21, 2015.
- The 2016 Groundwater sampling/analytical results report was submitted on June 16, 2016.
- Review with the NYSDEC PM if another groundwater sampling / analytical for fall 2016 was necessary. This was discussed and will not be necessary to perform at this time.

Periodic Review Report (PRR)

- 2016 PRP starting to be prepared for submittal in January 2017.

If you have questions regarding the October 2016 OM&M report summary, please do not hesitate to contact me at 716-684-8060.

Very Truly Yours,
Ecology and Environment Engineering, P. C.

Michael G. Steffan
Project Manager

cc: D. Szymanski, Region 9, NYSDEC - Buffalo w/ attachments
D. Iyer, IEG – w/attachments
CTF - 10C3074.0011.07

Table 1
Mr. C's Dry Cleaners Site Remediation
Site #915157
System Operation and Management

Month	Up-time		Treated Effluent (gallon)	VOC Removal		
	Reporting Hours	Operational Up-time		Influent VOCs (µg/L)	Effluent VOCs(µg/L)	VOCs Removed (lbs.)
(Up-time from 9/5/02 to 01/04/16)	**111,949.50**	**95.23%**	**128,814,819**	**NA**	**NA**	**1,614.16**
January 4, 2016 - February 1, 2016	672	100.00%	305,578	692.0	0.0	1.76
February 1, 2016 - February 29, 2016	0	0.00%	0	0.0	0.0	0.00
March 1, 2016 - March 31, 2016	0	0.00%	0	0.0	0.0	0.00
April 1, 2016 - April 30, 2016	0	0.00%	0	0.0	0.0	0.00
April 31, 2016 - June 1, 2016	0	0.00%	0	0.0	0.0	0.00
June 1, 2016 - June 27, 2016	0	0.00%	0	0.0	0.0	0.00
June 27, 2016 - July 31, 2016	0	0.00%	0	0.0	0.0	0.00
July 31, 2016 - September 3, 2016	0	0.00%	0	0.0	0.0	0.00
September 3, 2016 - September 27, 2016	0	0.00%	0	0.0	0.0	0.00
October 6, 2016 - October 31, 2016	600	100.00%	259,917	498.0	12.2	1.05

Total in 2016	**1,272.00**	**1.00**	**565,495**	**1,190.00**	**12.20**	**2.81**
Total from startup	**113,221.50**	**0.95**	**129,380,314.00**	**NA**	**NA**	**1,616.98**

NOTES:

1. Up-time based as percentage of total reporting hours.
2. Treatment system operated by the Tyree Organization Ltd. from 9/02 - 9/03.
3. Treatment system operated by O&M Enterprises Inc. from 10/03 - 7/07.
4. Treatment system operated by Iyer Environmental Group from 7/07 to present.
5. VOC removal calculations are based on monthly water samples and assumes samples are representative of the entire reporting period.
6. VOC removal calculations assume that non-detect values = 0 ug/L.
7. Total VOCs summations include estimated "J" values.
8. VOC removal calculations are based on effluent totalizer readings.
9. "Influent VOCs" and "Effluent VOCs" values given above is the summation of values for individual compounds given in monthly analytical reports.
10. Unit conversion: 1 pound = 453.5924 grams, 1 gallon = 3.785 liters
11. Formula for the VOC removal calculation:

$(VOCs_{Influent} - VOCs_{Effluent})(ug/L) \cdot (1g/10^6 ug) \cdot (1\ lb/453.5924\ g) \cdot (Monthly\ process\ water)(gal) \cdot (3.785\ L/gallon)$

12. Using the 2/2/16 analytical results.

Table 2
Mr. C's Dry Cleaners Site Remediation
Site #915157
Effluent Discharge Criteria & Analytical Compliance Results

Parameter/Analyte	Daily Maximum[1]	Units	October - Effluent Analytical Values - Compliance
Flow (Average)	N/A	gpd	10,397
pH	6.0 - 9.0	standard units	7.50
1,1 Dichloroethene	10	µg/L	ND
1,1 Dichloroethane	10	µg/L	ND
cis-1,2-dichloroethene	10	µg/L	4.00
Trichloroethene	10	µg/L	ND
Tetrachloroethene	10	µg/L	5.00
Vinyl Chloride	10	µg/L	ND
Benzene	5	µg/L	ND
Ethylbenzene	5	µg/L	ND
Methylene Chloride	10	µg/L	ND
1,1,1 Trichloroethane	10	µg/L	ND
Toluene	5	µg/L	ND
Methyl-t-Butyl Ether (MTBE)	NA	ug/L	ND
o-Xylene[2]	5	µg/L	ND
m, p-Xylene[2]	10	µg/L	ND
Total Xylenes	NA	ug/L	ND
Iron, total[9]	600	µg/L	
Aluminum[9]	4,000	µg/L	
Copper[9]	48	µg/L	
Lead[9]	11	µg/L	
Manganese[9]	2,000	µg/L	
Silver[9]	100	µg/L	
Vanadium[9]	28	µg/L	
Zinc[9]	230	µg/L	
Total Dissolved Solids[9]	850	mg/L	
Total Suspended Solids[9]	20	mg/L	
Hardness	N/A	mg/L	330
Cyanide, Free[9]	10	µg/L	

NOTES:

1. "Daily Maximum" excerpted from Attachment E of Addendum 1 to the Construction Contract Documents dated October 2000.
2. Analytical report did not differentiate between o-Xylene and m, p-Xylene. Total Xylene value reported is given in each line.
3. Shaded cells indicate that analytical value exceeds the "Daily Maximum."
4. "ND" indicates that the compound was not detected and lists the practical quantitation limit in parentheses.
5. "NA" indicates that analyses were not performed and data is unavailable.
6. Average flows based on effluent readings: **October 6 - October 31, 2016 - 10,397 gallons per day.**
7. "J" indicates an estimated value below the detection limit.
8. "B" indicates analyte found in the associated blank.
9. Removed from the required analysis list by NYSDEC Region 9 in February 2005.
10. "NS" indicates that the parameter analysis was not sampled.

40 **Indicates non-compliance with the NYSDEC effluent discharge requirements**
NR **Indicates Not Reported by Lab**

Table 3
Mr. C's Dry Cleaners Site Remediation
NYSDEC Site #915157
October 2016 VOC Analytical Summary

Compound	Based on the October Effluent Analytical Results				
	Influent Concentration* (ug/L)		Effluent Concentration** (ug/L)		Cleanup Efficiency*** (%)
Acetone	ND (<20)	U	3.2	J	NA
Benzene	ND (<4.0)	U	ND (<1.0)	U	NA
2-Butanone	10	J	ND (<5.0)	U	NA
cis-1, 2-Dichloroethene	160		4.0		97.50%
Chloroform	ND (<4.0)	U	ND (<1.0)	U	NA
Chloromethane	ND (<4.0)	U	ND (<1.0)	U	NA
Methylene chloride	ND (<4.0)	U	ND (<1.0)	U	NA
Methyl tert-butyl ether (MTBE)	ND (<4.0)	U	ND (<1.0)	U	NA
Methyl acetate	ND (<4.0)	U	ND (<1.0)	U	NA
Tetrachloroethene (PCE)	280		5.0	U	98.20%
Toluene	ND (<4.0)	U	ND (<1.0)	U	NA
Trichloroethene (TCE)	23.0		ND (<1.0)	U	100.00%
Carbon Disulfide	ND (<4.0)	U	ND (<1.0)	U	NA
1,1,2 Trichloro-1,2,2-trifluororethane	ND (<4.0)	U	ND (<1.0)	U	NA
2-Hexanone	ND (<20)	U	ND (<5.0)	U	NA
4-Methyl-2-pentanone	ND (<20)	U	ND (<5.0)	U	NA
Cyclohexane	ND (<4.0)	U	ND (<1.0)	U	NA
trans-1,2-dichloroethene	ND (<4.0)	U	ND (<1.0)	U	NA
Chlorobenzene	ND (<4.0)	U	ND (<1.0)	U	NA
Methylcyclohexane	ND (<4.0)	U	ND (<1.0)	U	NA
Ethylbenzene	ND (<4.0)	U	ND (<1.0)	U	NA
Methyl acetate	ND (<4.0)	U	ND (<1.0)	U	NA
Vinyl Chloride	25		ND (<1.0)	U	100.00%
Total Xylenes	ND (<4.0)	U	ND (<1.0)	U	NA
• The 1st progress monitoring sampling of the groundwater wells associated with the "pilot" bioaugmentation program was performed on July 1-2, 2013.	**498.0**		**12.20**		**97.50%**

Notes:
1. "NA" = Not applicable
2. "U" = Compound analyzed, but was not detected. Detection limit in parentheses.
3. "DJ" or "J" indicates an estimated value below the practical quantitation limit but above the method detection limit.
4. Non-detect values are assumed to be equal to zero for calculation of monthly average concentrations.
5. "D" indicates the compound concentration was obtained form a secondary dilution analysis.
6. Acetone was not detected in the influent sample above the MDL but detected in the effluent sample. It is not a contaminant of concern for the Mr. C's site.

* Detection Limits (<10) and (<50)
** Detection Limits (<1) and (<5)
*** Contaminants of Concern only

Attachment A
IEG Summary of Field Activities
October 2016

10/6/16

10/17/16

10/31/16

MR. C's DRY CLEANERS SITE
NYSDEC Site #9-15-157
OM&M: SITE INSPECTION FORM

DATE: 6-Oct-16 ACTIVITIES: Site Inspection

INSPECTION PERSONNEL: R. Allen, D. Iyer OTHER PERSONNEL: ---------

WEATHER CONDITIONS: Partly cloudy, warm OUTSIDE TEMPERATURE (°F): 73

ARE WELL PUMPS OPERATING IN AUTO: YES: _____ NO: √ If "NO", provide explanation below

PW-4 does not turn ON.

PROVIDE WATER LEVEL READINGS ON CONTROL PANEL

RW-1	ON: √	OFF: _____	_____ ft	PW-5	ON: √	OFF: _____	_____ ft
PW-2	ON: √	OFF: _____	_____ ft	PW-6	ON: √	OFF: _____	_____ ft
PW-3	ON: √	OFF: _____	_____ ft	PW-7	ON: √	OFF: _____	_____ ft
PW-4	ON: _____	OFF: _____	_____ ft	PW-8	ON: √	OFF: _____	_____ ft

EQUALIZATION TANK: _____ ft Last Alarm D/T/Condition: CODE; 03, 12

NOTES: _____

INFLUENT FLOW RATE: 0 gpm INFLUENT TOTALIZER READING 11,955,825 gallons

SEQUESTERING AGENT DRUM LEVEL: 33 inches (x 1.7=) AMOUNT OF AGENT REMAINING: 55 gallons

SEQUESTERING AGENT FEED RATE: _____ ml/min METERING PUMP PRESSURE: _____ psi

BAG FILTER PRESSURES:	Top	Bottom		Top	Bottom	
LEFT:	0	0	psi	RIGHT: 5	0	psi

INFLUENT FEED PUMP IN USE: #1 √ #2 _____ INFLUENT PUMP PRESSURE: 6 psi

AIR STRIPPER BLOWER IN USE: #1 √ #2 _____ AIR STRIPPER PRESSURE: 10.0 in. H_2O

AIR STRIPPER DIFFERENTIAL PRESSURE: _____ in. H_2O DISCHARGE PRESSURE: 3.20 in. H_2O

AIR FLOW: 1700 fpm X 1.4 = 2380 CFM 105^0 F

EFFLUENT PUMP IN USE: #1 _____ #2 √ EFFLUENT FEED PUMP PRESSURE: 9 psi

EFFLUENT FLOW RATE: _____ gpm EFFLUENT TOTALIZER READING: 80,832,291 | 444740 gallons

ARE BUILDING HEATERS IN USE? YES: _____ NO: √ INSIDE TEMPERATURE (°F): 77

IS SUMP PUMP IN USE: YES: √ NO: _____ ARE ANY LEAKS PRESENT? YES: √ NO: _____

WATER LEVEL IN SUMP: 5.0 in. TREATMENT BUILDING CLEAN & ORGANIZED? YES: √ NO: _____

MR. C's DRY CLEANERS SITE
NYSDEC Site #90150157
SITE INSPECTION FORM

6-Oct-16

SAMPLES COLLECTED? YES: _____ NO: √

	Sample ID	Time of Sampling	pH	Turbidity	Temp.	Sp. Cond.
AIR STRIPPER INFLUENT:						
AIR STRIPPER EFFLUENT:						

IS THERE EVIDENCE OF TAMPERING/VANDALISM OF WELLS: ? YES: _____ NO: √

WERE MANHOLES INSPECTED? YES: √ NO: _____

WERE ELECTRICAL BOXES INSPECTED? YES: √ NO: _____

IS WATER PRESENT IN ANY MANHOLES OR ELECTRICAL BOXES? YES: _____ NO: √

If yes, provide manhole/electric box ID and description of any corrective measures below:

PZ-4B was replaced by the Town of Aurora.

SUBSLAB SYSTEM

MANOMETER: 1.5 **in. WC** (Fan Inlet)

	west	east
FLOW (fpm):		
FLOW (cfm):		
VACUUM GAUGE (in WC)		

NOTES: cfm = 0.05 x fpm (3" PVC)

INCLUDE REMARKS & DESCRIBE ANY OTHER SYSTEM MAINTENANCE PERFORMED ON MR. C's SITE

Remarks: Started System on Oct 6.

Left Bag Filter - slow leak through bottom of housing. Air Stripper - (5) slow leaks.

Other Actions: Mixed (3) drums of 1:3 Redux / Water.

AGWAY

Remarks: Site is empty of materials and has been graded and graveled.

Other Actions:

MR. C's DRY CLEANERS SITE
NYSDEC Site #9-15-157
OM&M: SITE INSPECTION FORM

DATE: 17-Oct-16 ACTIVITIES: Site Inspection

INSPECTION PERSONNEL: R. Allen OTHER PERSONNEL: --------

WEATHER CONDITIONS: Cloudy, drizzle, warm OUTSIDE TEMPERATURE (°F): 70

ARE WELL PUMPS OPERATING IN AUTO: YES: _____ NO: √ If "NO", provide explanation below

PW-7 is OFF due to injection operation

PW-4 is OFF due to maintenance problem

PROVIDE WATER LEVEL READINGS ON CONTROL PANEL

RW-1	ON: _____	OFF: √	3 ft	PW-5	ON: _____	OFF: √	5 ft
PW-2	ON: _____	OFF: √	3 ft	PW-6	ON: _____	OFF: √	5 ft
PW-3	ON: _____	OFF: √	5 ft	PW-7	ON: _____	OFF: √	12 ft
PW-4	ON: _____	OFF: √	-28 ft	PW-8	ON: _____	OFF: √	4 ft

EQUALIZATION TANK: 4 ft Last Alarm D/T/Condition: 10/17/16 PW-2 Overload

NOTES: _____

INFLUENT FLOW RATE: 5 gpm INFLUENT TOTALIZER READING 12,027,695 gallons

SEQUESTERING AGENT DRUM LEVEL: 26 inches (x 1.7=) AMOUNT OF AGENT REMAINING: 44 gallons

SEQUESTERING AGENT FEED RATE: _____ ml/min METERING PUMP PRESSURE: 4.0 psi

		Top	Bottom		Top	Bottom
BAG FILTER PRESSURES:	LEFT:	0	0 psi	RIGHT:	6 - 8	0 psi

INFLUENT FEED PUMP IN USE: #1 √ #2 _____ INFLUENT PUMP PRESSURE: 7 psi

AIR STRIPPER BLOWER IN USE: #1 √ #2 _____ AIR STRIPPER PRESSURE: 23.0 in. H_2O

AIR STRIPPER DIFFERENTIAL PRESSURE: broken in. H_2O DISCHARGE PRESSURE: 1.90 in. H_2O

AIR FLOW: 1350 fpm X 1.4 = 1890 CFM

EFFLUENT PUMP IN USE: #1 _____ #2 √ EFFLUENT FEED PUMP PRESSURE: 9 psi

EFFLUENT FLOW RATE: _____ gpm EFFLUENT TOTALIZER READING: 80,889,185 | 502490 gallons

ARE BUILDING HEATERS IN USE? YES: _____ NO: √ INSIDE TEMPERATURE (°F): 78

IS SUMP PUMP IN USE: YES: √ NO: _____ ARE ANY LEAKS PRESENT? YES: √ NO: _____

WATER LEVEL IN SUMP: 6.0 in. TREATMENT BUILDING CLEAN & ORGANIZED? YES: √ NO: _____

MR. C's DRY CLEANERS SITE
NYSDEC Site #90150157
SITE INSPECTION FORM

17-Oct-16

SAMPLES COLLECTED? YES: _____ NO: √

	Sample ID	Time of Sampling	pH	Turbidity	Temp.	Sp. Cond.
AIR STRIPPER INFLUENT:						
AIR STRIPPER EFFLUENT:						

IS THERE EVIDENCE OF TAMPERING/VANDALISM OF WELLS: ? YES: _____ NO: √

WERE MANHOLES INSPECTED? YES: √ NO: _____

WERE ELECTRICAL BOXES INSPECTED? YES: √ NO: _____

IS WATER PRESENT IN ANY MANHOLES OR ELECTRICAL BOXES? YES: √ NO: _____

If yes, provide manhole/electric box ID and description of any corrective measures below:

PZ-4D inner ring is corroded and collapsing.

SUBSLAB SYSTEM

MANOMETER: 1.5 **in. WC** (Fan Inlet)

	west	east
FLOW (fpm):		
FLOW (cfm):		
VACUUM GAUGE (in WC)	1.34	1.37

NOTES: cfm = 0.05 x fpm (3" PVC)

INCLUDE REMARKS & DESCRIBE ANY OTHER SYSTEM MAINTENANCE PERFORMED ON MR. C's SITE

Remarks:

Two Air Stripper float fittings have slow drip leaks.

Other Actions: Adjust Jesco Pump to: Left 3.0; Right 3.0.

Drained (2) SVE Systems as needed: little condensate

Emptied some decanted Air Stripper sump box drained water into floor sump box.

AGWAY

Remarks: Site is empty of materials and has been graded and graveled.

Other Actions:

MR. C's DRY CLEANERS SITE
NYSDEC Site #9-15-157
OM&M: SITE INSPECTION FORM

DATE: 31-Oct-16 ACTIVITIES: Site Inspection

INSPECTION PERSONNEL: R. Allen OTHER PERSONNEL:

WEATHER CONDITIONS: Partly cloudy, cool OUTSIDE TEMPERATURE (°F): 35

ARE WELL PUMPS OPERATING IN AUTO: YES: NO: If "NO", provide explanation below

PW-7 is OFF due to injection operation

PROVIDE WATER LEVEL READINGS ON CONTROL PANEL

RW-1	ON:	OFF: √	7 ft	PW-5	ON:	OFF: √	5 ft		
PW-2	ON:	OFF: √	3 ft	PW-6	ON:	OFF: √	6 ft		
PW-3	ON:	OFF: √	5 ft	PW-7	ON: √	OFF:	13 ft		
PW-4	ON:	OFF: √	4 ft	PW-8	ON:	OFF: √	6 ft		

EQUALIZATION TANK: 3 ft Last Alarm D/T/Condition: 10/31/16 PW-2 Overload

NOTES:

INFLUENT FLOW RATE: 0 gpm INFLUENT TOTALIZER READING 12,236,479 gallons

SEQUESTERING AGENT DRUM LEVEL: 8 inches (x 1.7=) AMOUNT OF AGENT REMAINING: 13.5 gallons

SEQUESTERING AGENT FEED RATE: ml/min METERING PUMP PRESSURE: 4.0 psi

	Top	Bottom		Top	Bottom	
BAG FILTER PRESSURES:	LEFT: 10 - 0	0	psi	RIGHT: 19 - 7	0	psi

INFLUENT FEED PUMP IN USE: #1 √ #2 INFLUENT PUMP PRESSURE: 7 psi

AIR STRIPPER BLOWER IN USE: #1 √ #2 AIR STRIPPER PRESSURE: 26.0 in. H_2O

AIR STRIPPER DIFFERENTIAL PRESSURE: broken in. H_2O DISCHARGE PRESSURE: 1.80 in. H_2O

AIR FLOW: 1350 fpm X 1.4 = 1890 CFM

EFFLUENT PUMP IN USE: #1 #2 √ EFFLUENT FEED PUMP PRESSURE: 9 psi

EFFLUENT FLOW RATE: 138 gpm EFFLUENT TOTALIZER READING: 81,056,073 | 672320 gallons

ARE BUILDING HEATERS IN USE? YES: √ NO: INSIDE TEMPERATURE (°F): 67

IS SUMP PUMP IN USE: YES: √ NO: ARE ANY LEAKS PRESENT? YES: √ NO:

WATER LEVEL IN SUMP: 5.5 in. TREATMENT BUILDING CLEAN & ORGANIZED? YES: √ NO:

MR. C's DRY CLEANERS SITE
NYSDEC Site #90150157
SITE INSPECTION FORM

31-Oct-16

SAMPLES COLLECTED? YES: _____ NO: √

	Sample ID	Time of Sampling	pH	Turbidity	Temp.	Sp. Cond.
AIR STRIPPER INFLUENT:						
AIR STRIPPER EFFLUENT:						

IS THERE EVIDENCE OF TAMPERING/VANDALISM OF WELLS: ? YES: _____ NO: √

WERE MANHOLES INSPECTED? YES: √ NO: _____

WERE ELECTRICAL BOXES INSPECTED? YES: √ NO: _____

IS WATER PRESENT IN ANY MANHOLES OR ELECTRICAL BOXES? YES: _____ NO: √

If yes, provide manhole/electric box ID and description of any corrective measures below:

PZ-4D inner ring is corroded and collapsing.

SUBSLAB SYSTEM

MANOMETER: 1.4 **in. WC** (Fan Inlet)

	west	east
FLOW (fpm):		
FLOW (cfm):		
VACUUM GAUGE (in WC)		

NOTES: cfm = 0.05 x fpm (3" PVC)

INCLUDE REMARKS & DESCRIBE ANY OTHER SYSTEM MAINTENANCE PERFORMED ON MR. C's SITE

Remarks: Two Air Stripper float fittings have slow drip leaks.

Effluent Pipe has (2) slow drip leaks near EQ Tank.

Other Actions: Drained (2) SVE Systems as needed: little condensate

Reduced Jesco Pump settings to: Left 3.0; Right 3.0.

AGWAY

Remarks: Site is empty of materials and has been graded and graveled.

Other Actions:

MR. C's DRY CLEANERS SITE
NYSDEC Site #9-15-157
OM&M: PIEZOMETER WATER LEVEL LOG

Date: Oct 18-19, 2016 **Measurements taken by:** R. Allen

RW-1	19.10 ft	
PZ-1A	12.33 ft	
PZ-1B	12.08 ft	
PZ-1C	13.21 ft	
PZ-1D	13.37 ft	
PW-2	14.80 ft	
PZ-2A	11.87 ft	
PZ-2B	12.21 ft	
PZ-2C	11.68 ft	
MW-7	----- ft	Auto parked over
PW-3	15.80 ft	
PZ-3A	12.36 ft	
PZ-3B	12.49 ft	
PZ-3C	12.88 ft	
PZ-3D	12.37 ft	
PW-4	11.60 ft	
PZ-4A	12.68 ft	
PZ-4B	11.67 ft	
PZ-4C	------ ft	Sealed Over
PZ-4D	11.35 ft	

PW-5	15.50 ft	
PZ-5A	11.63 ft	
PZ-5B	11.68 ft	
PZ-5C	11.29 ft	
PZ-5D	12.05 ft	
PW-6	18.10 ft	
PZ-6A	12.56 ft	
PZ-6B	12.42 ft	
PZ-6C	12.70 ft	
PZ-6D	12.42 ft	Shown as RW-2 on Map
PW-7	12.00 ft	
MPI-6S	12.46 ft	
PZ-7B	12.25 ft	
OW-B	11.88 ft	
PZ-7D	----- ft	
PW-8	20.20 ft	
PZ-8A	9.20 ft	
PZ-8B	9.13 ft	
PZ-8C	8.79 ft	
PZ-8D	8.95 ft	

OTHER WELLS

EE-1	Sealed over ft	MPI-1S	11.32 ft	MPI-7IR	12.07 ft	ESI-3	12.08 ft
EE-2	12.95 ft	MPI-2SR	12.14 ft	MPI-8SR	10.80 ft	ESI-6	11.13 ft
EE-3	11.60 ft	MPI-3S	11.08 ft	MPI-9SR	10.31 ft	ESI-2R	14.10 ft
EE-4	Sealed over ft	MPI-4S	8.83 ft	MPI-13BR	10.22 ft	ESI-5R	8.97 ft
MW-8	12.17 ft	MPI-4I	12.13 ft	MPI-14BR	11.14 ft		
MW-11	10.84 ft	MPI-5S	12.79 ft	MPI-15B	10.77 ft		

COMMENTS:	PZ-4D inner ring is corroded and collapsing
	Need soil for PW-8

1. PZ-4B showing snowplow damage to inner ring

2. PZ-4B after Town of Aurora installed replacement road box

3. Air Stripper showing epoxy repairs on corroded areas

4. Air Stripper effluent fitting showing epoxy repairs

5. Liquid Containment Trench along south wall of Treatment Room

6. Liquid Containment Trench at southeast corner of the Treatment Room

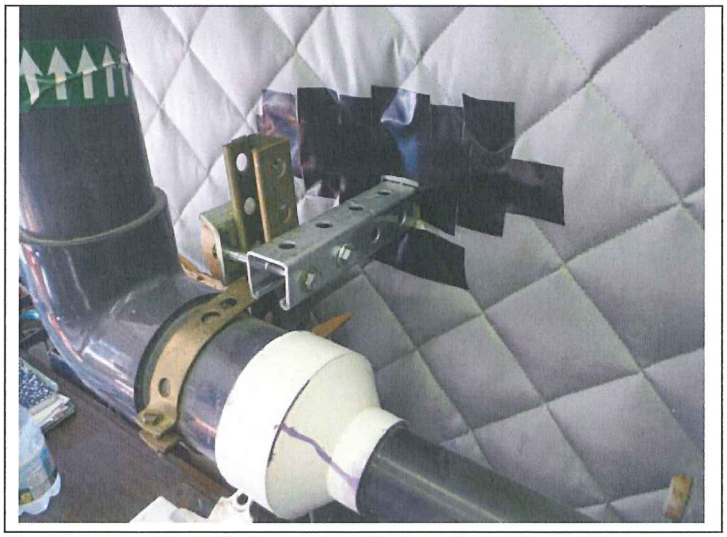
TREATMENT SYSTEM OM&M **October 2016**	IEG	**SYSTEM REPAIR PHOTOS** **1 of 1**
Mr. C's Dry Cleaners Site, East Aurora, NY		

1. PZ-1B showing concrete damage from winter conditions

2. PZ-1B after concrete repair with MG-KRETE

3. PZ-6A after snowplow damage repair with MG-KRETE

4. PZ-6C after snowplow damage repair with MG-KRETE



5. Close up of middle brace installed on the Effluent Pipe

6. Overview showing all three braces on the Effluent Pipe

TREATMENT SYSTEM OM&M **September 2016**	IEG	**SYSTEM REPAIR PHOTOS** **1 of 1**
Mr. C's Dry Cleaners Site, East Aurora, NY		

Attachment B
Analytical Report from
Spectrum Analytical Laboratories

Analytical Data Package Work Order ID: R00985
Sampled by IEG: October 26, 2016

Eurofins Spectrum Analytical, Inc. -- ESAI-RI

11/02/2016

Client: Ecology and Environment Engineering P.C.
Client Sample ID: INFLUENT
Lab ID: R0985-01

Project: Mr. C's Dry Cleaning
Collection Date: 10/26/2016 10:00

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SW846 8260C -- VOC by GC-MS							**SW8260_W**
Dichlorodifluoromethane	ND		4.0	ug/L	4	10/31/2016 18:04	85753
Chloromethane	ND		4.0	ug/L	4	10/31/2016 18:04	85753
Vinyl chloride	25		4.0	ug/L	4	10/31/2016 18:04	85753
Bromomethane	ND		4.0	ug/L	4	10/31/2016 18:04	85753
Chloroethane	ND		4.0	ug/L	4	10/31/2016 18:04	85753
Trichlorofluoromethane	ND		4.0	ug/L	4	10/31/2016 18:04	85753
1,1-Dichloroethene	ND		4.0	ug/L	4	10/31/2016 18:04	85753
Acetone	ND		20	ug/L	4	10/31/2016 18:04	85753
Carbon disulfide	ND		4.0	ug/L	4	10/31/2016 18:04	85753
Methylene chloride	ND		4.0	ug/L	4	10/31/2016 18:04	85753
trans-1,2-Dichloroethene	ND		4.0	ug/L	4	10/31/2016 18:04	85753
Methyl tert-butyl ether	ND		4.0	ug/L	4	10/31/2016 18:04	85753
1,1-Dichloroethane	ND		4.0	ug/L	4	10/31/2016 18:04	85753
2-Butanone	10	J	20	ug/L	4	10/31/2016 18:04	85753
cis-1,2-Dichloroethene	160		4.0	ug/L	4	10/31/2016 18:04	85753
Chloroform	ND		4.0	ug/L	4	10/31/2016 18:04	85753
1,1,1-Trichloroethane	ND		4.0	ug/L	4	10/31/2016 18:04	85753
Carbon tetrachloride	ND		4.0	ug/L	4	10/31/2016 18:04	85753
1,2-Dichloroethane	ND		4.0	ug/L	4	10/31/2016 18:04	85753
Benzene	ND		4.0	ug/L	4	10/31/2016 18:04	85753
Trichloroethene	23		4.0	ug/L	4	10/31/2016 18:04	85753
1,2-Dichloropropane	ND		4.0	ug/L	4	10/31/2016 18:04	85753
Bromodichloromethane	ND		4.0	ug/L	4	10/31/2016 18:04	85753
cis-1,3-Dichloropropene	ND		4.0	ug/L	4	10/31/2016 18:04	85753
4-Methyl-2-pentanone	ND		20	ug/L	4	10/31/2016 18:04	85753
Toluene	ND		4.0	ug/L	4	10/31/2016 18:04	85753
trans-1,3-Dichloropropene	ND		4.0	ug/L	4	10/31/2016 18:04	85753
1,1,2-Trichloroethane	ND		4.0	ug/L	4	10/31/2016 18:04	85753
Tetrachloroethene	280		4.0	ug/L	4	10/31/2016 18:04	85753
2-Hexanone	ND		20	ug/L	4	10/31/2016 18:04	85753
Dibromochloromethane	ND		4.0	ug/L	4	10/31/2016 18:04	85753
1,2-Dibromoethane	ND		4.0	ug/L	4	10/31/2016 18:04	85753
Chlorobenzene	ND		4.0	ug/L	4	10/31/2016 18:04	85753
Ethylbenzene	ND		4.0	ug/L	4	10/31/2016 18:04	85753
Xylene (Total)	ND		4.0	ug/L	4	10/31/2016 18:04	85753
Styrene	ND		4.0	ug/L	4	10/31/2016 18:04	85753
Bromoform	ND		4.0	ug/L	4	10/31/2016 18:04	85753
Isopropylbenzene	ND		4.0	ug/L	4	10/31/2016 18:04	85753

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

Eurofins Spectrum Analytical, Inc. -- ESAI-RI

11/02/2016

Client: Ecology and Environment Engineering P.C.
Client Sample ID: INFLUENT
Lab ID: R0985-01

Project: Mr. C's Dry Cleaning
Collection Date: 10/26/2016 10:00

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SW846 8260C -- VOC by GC-MS							**SW8260_W**
1,1,2,2-Tetrachloroethane	ND		4.0	ug/L	4	10/31/2016 18:04	85753
1,3-Dichlorobenzene	ND		4.0	ug/L	4	10/31/2016 18:04	85753
1,4-Dichlorobenzene	ND		4.0	ug/L	4	10/31/2016 18:04	85753
1,2-Dichlorobenzene	ND		4.0	ug/L	4	10/31/2016 18:04	85753
1,2-Dibromo-3-chloropropane	ND		4.0	ug/L	4	10/31/2016 18:04	85753
1,2,4-Trichlorobenzene	ND		4.0	ug/L	4	10/31/2016 18:04	85753
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.0	ug/L	4	10/31/2016 18:04	85753
Cyclohexane	ND		4.0	ug/L	4	10/31/2016 18:04	85753
Methyl acetate	ND		4.0	ug/L	4	10/31/2016 18:04	85753
Methylcyclohexane	ND		4.0	ug/L	4	10/31/2016 18:04	85753
Surrogate: Dibromofluoromethane	103		85-115	%REC	4	10/31/2016 18:04	85753
Surrogate: 1,2-Dichloroethane-d4	101		70-120	%REC	4	10/31/2016 18:04	85753
Surrogate: Toluene-d8	97.9		85-120	%REC	4	10/31/2016 18:04	85753
Surrogate: Bromofluorobenzene	98.6		75-120	%REC	4	10/31/2016 18:04	85753

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

Eurofins Spectrum Analytical, Inc. -- ESAI-RI

11/02/2016

Client: Ecology and Environment Engineering P.C.
Client Sample ID: EFFLUENT
Lab ID: R0985-02

Project: Mr. C's Dry Cleaning
Collection Date: 10/26/2016 10:00

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SW846 8260C -- VOC by GC-MS							**SW8260_W**
Dichlorodifluoromethane	ND		1.0	ug/L	1	10/31/2016 17:40	85753
Chloromethane	ND		1.0	ug/L	1	10/31/2016 17:40	85753
Vinyl chloride	ND		1.0	ug/L	1	10/31/2016 17:40	85753
Bromomethane	ND		1.0	ug/L	1	10/31/2016 17:40	85753
Chloroethane	ND		1.0	ug/L	1	10/31/2016 17:40	85753
Trichlorofluoromethane	ND		1.0	ug/L	1	10/31/2016 17:40	85753
1,1-Dichloroethene	ND		1.0	ug/L	1	10/31/2016 17:40	85753
Acetone	3.2	J	5.0	ug/L	1	10/31/2016 17:40	85753
Carbon disulfide	ND		1.0	ug/L	1	10/31/2016 17:40	85753
Methylene chloride	ND		1.0	ug/L	1	10/31/2016 17:40	85753
trans-1,2-Dichloroethene	ND		1.0	ug/L	1	10/31/2016 17:40	85753
Methyl tert-butyl ether	ND		1.0	ug/L	1	10/31/2016 17:40	85753
1,1-Dichloroethane	ND		1.0	ug/L	1	10/31/2016 17:40	85753
2-Butanone	ND		5.0	ug/L	1	10/31/2016 17:40	85753
cis-1,2-Dichloroethene	4.0		1.0	ug/L	1	10/31/2016 17:40	85753
Chloroform	ND		1.0	ug/L	1	10/31/2016 17:40	85753
1,1,1-Trichloroethane	ND		1.0	ug/L	1	10/31/2016 17:40	85753
Carbon tetrachloride	ND		1.0	ug/L	1	10/31/2016 17:40	85753
1,2-Dichloroethane	ND		1.0	ug/L	1	10/31/2016 17:40	85753
Benzene	ND		1.0	ug/L	1	10/31/2016 17:40	85753
Trichloroethene	ND		1.0	ug/L	1	10/31/2016 17:40	85753
1,2-Dichloropropane	ND		1.0	ug/L	1	10/31/2016 17:40	85753
Bromodichloromethane	ND		1.0	ug/L	1	10/31/2016 17:40	85753
cis-1,3-Dichloropropene	ND		1.0	ug/L	1	10/31/2016 17:40	85753
4-Methyl-2-pentanone	ND		5.0	ug/L	1	10/31/2016 17:40	85753
Toluene	ND		1.0	ug/L	1	10/31/2016 17:40	85753
trans-1,3-Dichloropropene	ND		1.0	ug/L	1	10/31/2016 17:40	85753
1,1,2-Trichloroethane	ND		1.0	ug/L	1	10/31/2016 17:40	85753
Tetrachloroethene	5.0		1.0	ug/L	1	10/31/2016 17:40	85753
2-Hexanone	ND		5.0	ug/L	1	10/31/2016 17:40	85753
Dibromochloromethane	ND		1.0	ug/L	1	10/31/2016 17:40	85753
1,2-Dibromoethane	ND		1.0	ug/L	1	10/31/2016 17:40	85753
Chlorobenzene	ND		1.0	ug/L	1	10/31/2016 17:40	85753
Ethylbenzene	ND		1.0	ug/L	1	10/31/2016 17:40	85753
Xylene (Total)	ND		1.0	ug/L	1	10/31/2016 17:40	85753
Styrene	ND		1.0	ug/L	1	10/31/2016 17:40	85753
Bromoform	ND		1.0	ug/L	1	10/31/2016 17:40	85753
Isopropylbenzene	ND		1.0	ug/L	1	10/31/2016 17:40	85753

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

Eurofins Spectrum Analytical, Inc. -- ESAI-RI

11/02/2016

Client: Ecology and Environment Engineering P.C.
Client Sample ID: EFFLUENT
Lab ID: R0985-02

Project: Mr. C's Dry Cleaning
Collection Date: 10/26/2016 10:00

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SW846 8260C -- VOC by GC-MS							**SW8260_W**
1,1,2,2-Tetrachloroethane	ND		1.0	ug/L	1	10/31/2016 17:40	85753
1,3-Dichlorobenzene	ND		1.0	ug/L	1	10/31/2016 17:40	85753
1,4-Dichlorobenzene	ND		1.0	ug/L	1	10/31/2016 17:40	85753
1,2-Dichlorobenzene	ND		1.0	ug/L	1	10/31/2016 17:40	85753
1,2-Dibromo-3-chloropropane	ND		1.0	ug/L	1	10/31/2016 17:40	85753
1,2,4-Trichlorobenzene	ND		1.0	ug/L	1	10/31/2016 17:40	85753
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	ug/L	1	10/31/2016 17:40	85753
Cyclohexane	ND		1.0	ug/L	1	10/31/2016 17:40	85753
Methyl acetate	ND		1.0	ug/L	1	10/31/2016 17:40	85753
Methylcyclohexane	ND		1.0	ug/L	1	10/31/2016 17:40	85753
Surrogate: Dibromofluoromethane	103		85-115	%REC	1	10/31/2016 17:40	85753
Surrogate: 1,2-Dichloroethane-d4	102		70-120	%REC	1	10/31/2016 17:40	85753
Surrogate: Toluene-d8	94.0		85-120	%REC	1	10/31/2016 17:40	85753
Surrogate: Bromofluorobenzene	95.2		75-120	%REC	1	10/31/2016 17:40	85753

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

Eurofins Spectrum Analytical, Inc. -- ESAI-RI

11/02/2016

Client: Ecology and Environment Engineering P.C.
Client Sample ID: INFLUENT
Lab ID: R0985-01

Project: Mr. C's Dry Cleaning
Collection Date: 10/26/2016 10:00

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SM 4500 H+ B -- pH VALUE							**SM4500_H+**
pH	7.4		1.0	S.U.	1	10/27/2016 12:50	R96790
The pH value was measured at the temperature of	18			C	1	10/27/2016 12:50	R96790

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

Eurofins Spectrum Analytical, Inc. -- ESAI-RI

11/02/2016

Client: Ecology and Environment Engineering P.C.
Client Sample ID: EFFLUENT
Lab ID: R0985-02

Project: Mr. C's Dry Cleaning
Collection Date: 10/26/2016 10:00

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SM 4500 H+ B -- pH VALUE							**SM4500_H+**
pH	7.5		1.0	S.U.	1	10/27/2016 12:53	R96790
The pH value was measured at the temperature of	17			C	1	10/27/2016 12:53	R96790

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

Eurofins Spectrum Analytical, Inc. -- ESAI-RI

11/02/2016

Client: Ecology and Environment Engineering P.C.
Client Sample ID: INFLUENT
Lab ID: R0985-01

Project: Mr. C's Dry Cleaning
Collection Date: 10/26/2016 10:00

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SM 2340B -- HARDNESS by Calculation							**SM2340_W**
Hardness, Ca/Mg (As CaCO3)	320		4.0	mg/L CaCO3	1	10/28/2016 16:00	85741

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

Eurofins Spectrum Analytical, Inc. -- ESAI-RI

11/02/2016

Client: Ecology and Environment Engineering P.C.
Client Sample ID: EFFLUENT
Lab ID: R0985-02

Project: Mr. C's Dry Cleaning
Collection Date: 10/26/2016 10:00

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SM 2340B -- HARDNESS by Calculation							**SM2340_W**
Hardness, Ca/Mg (As CaCO3)	330		4.0	mg/L CaCO3	1	10/28/2016 16:03	85741

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

Attachment C
Summary of Site Utility Costs and Projections
January to December 2016

Mr. C's Dry Cleaners Site - Remedial Treatment Utility Costs

ATTACHMENT C

NYSDEC Work Assignment #10C3074.0010.07

12 Months of System Operation and Maintenance

October 2016 Report

Utility Budget:

Electric:	$25,300.00
Telephone:	$540.00
Gas	$1,120.00
Total:	$26,960.00

Gas, Telephone, and Electric

Utility Provider	Account #	E&E Cost Center	Description	Jan-2016	Feb-2016	Mar-2016	Apr-2016	May-2016	Jun-2016	
New York State E&G	1001-0310-422	EN-003229-0001-03TTO	Mr. C's Electric Costs	$ 577.59	$ 762.15	$ 265.95	$ 177.66	$ 188.45	$163.34	
New York State E&G	76-311-11-015900-18									
National Fuel Gas	5819628-05	EN-003229-0001-03TTO	Mr. C's Natural Gas Costs	$ 68.33	$ 4.15	$ 58.82	$ 8.76	$ 24.37	$17.22	
			Totals	**$ 645.92**	**$ 766.30**	**$ 324.77**	**$ 186.42**	**$ 212.82**	**$ 180.56**	

				Jul-2016	Aug-2016	Sep-2016	Oct-2016	Nov-2016	Dec-2016	Ave. /Month
			Mr. C's Electric Costs	$ 175.96	$ 194.31	$ 198.23	$ 486.70			**$ 319.03**
			Mr. C's Natural Gas Costs	$21.17	$ 20.42	$ 20.79				**$ 27.11**
			Totals	**$197.13**	**$ 214.73**	**$ 219.02**	**$ 486.70**	**$ -**	**$ -**	**$ 346.15**

		Electric - Mr. C's	**$3,190.34**	**Notes:**
		Natural Gas - Mr. C's	**$ 244.03**	Overbilled natural gas costs - no charges
		Grand Total - NYSE&G/National Fuel Gas Costs To Date	**$ 3,434.37**	**Estimated Reading** $ 333.44 in red -adjusted billing

Phone

Utility Provider	Phone #	E&E Cost Center	Location Description	Jan-2016	Feb-2016	Mar-2016	Apr-2016	May-2016	Jun-2016	
Verizon	716-652-0094	EN-003229-0001-03TTO	Mr. C's Telephone Costs	$ 36.01	$ 36.16	$ 36.16	$ 36.16	$ 40.86	$ 36.41	
Account #										
716 652 0094 416 26 2										

				Jul-2016	Aug-2016	Sep-2016	Oct-2016	Nov-2016	Dec-2016	Ave./Month
		EN-003229-0001-03TTO		$ 37.23	$ 38.32					**$ 37.16**

Verizon Costs to Date - Mr. C's	**$**	**297.31**
Grand Total All Utilities To Date	**$**	**3,731.68**

Mr. C's Dry Cleaners Site - Remedial Treatment Utility Costs

ATTACHMENT C

NYSDEC Work Assignment #11

12 Months of System Operation and Maintenance

October 2016 Report

Budget Remaining:

Electric:	**$22,109.66**	
Telephone:	**$242.69**	
Gas	**$875.97**	
Total:	**$23,228.32**	

	Optimum Operating Hours	Actual Operating Hours	Up-time Percentage	Capacity	Comments:
January-16	672	672	100.00%	9.7%	Very mild winter - very little snow.
February-16	0	0	0.00%	0.0%	System Shutdown
March-16	0	0	0.00%	0.0%	System Shutdown
April-16	0	0	0.00%	0.0%	System Shutdown
May-16	0	0	0.00%	0.0%	System Shutdown
June-16	0	0	0.00%	0.0%	System Shutdown
July-16	0	0	0.00%	0.0%	System Shutdown
August-16	0	0	0.00%	0.0%	System Shutdown
September-16	0	0	0.00%	0.0%	System Shutdown
October-16	600	600	100.00%	9.2%	Clear - warm
November-16			#DIV/0!		
December-16			#DIV/0!		
Totals to Date	**1272**	**1272**	**100.00%**		

* Percent Capacity is based on initial operating groundwater flows from the eight installed pumps from 9/02. Evaluated on total gallons discharged for monthly operating time.
Maximum pump discharges calculated as an average of 78 gpm as the total for all 8 pumps at the site if all pumps operate 100%. With the exception of groundwater pump RW-1, all others run on a batch basis.

Monthly Average Costs

Mr. C's Electric	**$**	**319.03**			
Agway Electric	**$**	**-**			
Mr. C's Gas	**$**	**27.11**			
Mr. C's Telephone	**$**	**37.16**			
Ave. Utility Cost Total	**$**	**383.31**	**times**	**12 Month Estimate**	**$4,983.06**

ecology and environment engineering, p.c.
International Specialists in the Environment
BUFFALO CORPORATE CENTER
368 Pleasant View Drive
Lancaster, New York 14086
Tel: (716) 684-8060, Fax: (716) 684-0844

December 9, 2016

Mr. William Welling, Project Manager
New York State Department of Environmental Conservation
Division of Environmental Remediation
625 Broadway, 12th Floor
Albany, New York 12233 - 7013

Re: Mr. C's Dry Cleaners Site, Contract # D007617, Site # 915157
November 2016 Operations, Maintenance, and Monitoring Report

Dear Mr. Welling:

Ecology and Environment Engineering, P.C. (EEEPC) is pleased to provide the November 2016 Operations, Maintenance, and Monitoring (OM&M) Report for the Mr. C's Dry Cleaners Site, NYSDEC Site # 915157, located in the Village of East Aurora, New York. A summary of field activities prepared by EEEPC's subcontractor, Iyer Environmental Group, PLLC (IEG), is provided in Attachment A. The treatment system was re-actived as a result of the recommendations of the remedial Site Optimization plan in October 2016. Selected pages from the individual analytical data package prepared by Spectrum Analytical Inc. (SAI), Warwick, Rhode Island are provided as Attachment B. The site utility information is provided in Attachment C.

Per your request, the Mr. C's treatment system has been shutdown since February 4, 2016. The revised RSO was submitted September 23, 2016. Per our conversations, restart of the treatment system was restarted October 6, 2016. IEG performed review the pumping systems and the treatment operations before startup. As a result of the final RSO document, a proposed pulsing plan was submitted to NYSDEC on October 31, 2016. The proposed pulsing plan was revised and resubmitted after NYSDEC comments on November 23, 2016. The plan was approved by NYSDEC on December 6, 2016. The written plan was developed to optimize the system through a schedule phased and pulsed operations to confirm that asymptotic groundwater conditions have been met in accordance with the DER 10 requirements to support treatment system shutdown.

Influent/effluent samples were taken on December 5, 2016. Monthly water depth measurements are taken at the site's groundwater monitoring wells, piezometers, and pumping wells during November by IEG (Attachment A).

Groundwater sampling was performed by EEEPC from April 25-May 2, 2016 to evaluate the potential for rebound of the volatile organic compounds around the Mr. C's site. The 2016 Groundwater Report was issued on June 16, 2016.

In review of the on-site treatment system operations, monitoring and maintenance for November 2016, EEEPC offers the following comments and highlights:

Operational Summary

- The monthly checklists for system inspections from IEG are provided as Attachment A for 10/31/16, 11/14/16, 11/28/16, and 10/31/16.
- Based on inspection reports prepared by IEG, the remedial treatment system for the period above had a 100% operational up-time (Table 1) and the treatment of contaminated groundwater during that period totaling of 447,513 gallons (Table 1) for November 2016.
- The compliance samples were taken on December 5, 2016 (Attachment B) and the preliminary analytical results were received from SAI on December 8, 2016. The results indicated effluent discharges are in compliance with the SPDES Equivalency permit requirements. The results are provided in the Table 2.
- The analytical summary results of the November 2016 samples revealed the total volatile organic contaminant concentrations of the influent to be 580 µg/L or 580 ppb. In review of the effluent concentrations the results were 4.10 µg/L or 4.10 ppb. The summary of influent and effluent contaminant concentrations for the November 2016 sampling is presented in Table 1.
- The Mr. C's treatment system based on the total monthly flows removed 2.15 lbs. of targeted contaminants from the groundwater below the site in the month of November 2016 and the cleanup effectiveness was 99.3%. The calculations and data for the month are presented in Table 3.

Mr. C's Site – Remedial Operations and Maintenance Information

- The November 2016 summary of field activities performed between 10/31/2016 and 12/5/2016 from IEG are provided as Attachment A.
- Performed repairs on concrete pads around some of the pumping wells.
- Performed maintenance on slow leaking after restart on the bag filter unit and the air stripper trays.
- Cleaned and inspected the pumping wells pumps in anticipation of system startup.

Subslab Depressurization Systems (SSDS).

- Property owner at 27 Whaley Ave. (David Dubois) has not returned EEEPC's calls for inspection of the SSDS unit, EEEPC will continue to contact to obtain access for inspection.
- Drained the condensate from the SSDS units from the Country Cottage (586 Main Street – unit 4) and in Treatment Room unit.
- SSDS installation design at 31 Paine Street is currently in process.

Subslab Depressurization Systems (SSDS)- (Con't.).

- Discussion of new SSDS unit installation at 23 Paine Street is in progress. EEEPC needs to re-issue letter of determination of SSDS from NYSDOH to the new property owner. The new property owner of 23 Paine Street house as of November 2015 is David Dubois.

Status of Bioremediation Direct Push Injection Work.

- Additional review of the recommendations in the summary report to be evaluated with the Remedial Site Optimization (RSO) program.
- The Final RSO was issued to NYSDEC on September 23, 2016.
- Revised Pulsing Plan issued on November 23, 2016 and approved on December 6, 2016.

Soil Vapor Intrusion Investigation Program (2016)

- Discuss new property locations with NYSDEC / NYSDOH for SVII work in 2016.

Site Management Plan

- EEEPC submitted the updated/revised SMP to NYSDEC and NYSDEC Region 9 on March 2, 2015.
- This is an active site document, so future revisions will be performed once major changes to the management of the site are required after optimization evaluation is performed.

Annual Long-term Groundwater Monitoring Well Report

- Report of 2015 annual Groundwater results was issued to NYSDEC on December 21, 2015.
- The 2016 Groundwater sampling/analytical results report was submitted on June 16, 2016.
- Review with the NYSDEC PM if another groundwater sampling / analytical for fall 2016 was necessary. This was discussed and will not be necessary to perform at this time.

Periodic Review Report (PRR)

- 2016 PRR being prepared for submittal in January 2017. Forms received from NYSDEC on November 18, 2016.

If you have questions regarding the November 2016 OM&M report summary, please do not hesitate to contact me at 716-684-8060.

Very Truly Yours,
Ecology and Environment Engineering, P. C.

Michael G. Steffan
Project Manager

cc: D. Szymanski, Region 9, NYSDEC - Buffalo w/ attachments
D. Iyer, IEG – w/attachments
CTF - 10C3074.0011.07

Table 1
Mr. C's Dry Cleaners Site Remediation
Site #915157
System Operation and Management

Month	Up-time		Treated Effluent (gallon)	VOC Removal		
	Reporting Hours	Operational Up-time		Influent VOCs (µg/L)	Effluent VOCs(µg/L)	VOCs Removed (lbs.)
(Up-time from 9/5/02 to 01/04/16)	**111,949.50**	**95.23%**	**128,814,819**	**NA**	**NA**	**1,614.16**
January 4, 2016 - February 1, 2016	672	100.00%	305,578	692.0	0.0	1.76
February 1, 2016 - February 29, 2016	0	0.00%	0	0.0	0.0	0.00
March 1, 2016 - March 31, 2016	0	0.00%	0	0.0	0.0	0.00
April 1, 2016 - April 30, 2016	0	0.00%	0	0.0	0.0	0.00
April 31, 2016 - June 1, 2016	0	0.00%	0	0.0	0.0	0.00
June 1, 2016 - June 27, 2016	0	0.00%	0	0.0	0.0	0.00
June 27, 2016 - July 31, 2016	0	0.00%	0	0.0	0.0	0.00
July 31, 2016 - September 3, 2016	0	0.00%	0	0.0	0.0	0.00
September 3, 2016 - September 27, 2016	0	0.00%	0	0.0	0.0	0.00
October 6, 2016 - October 31, 2016	600	100.00%	259,917	498.0	12.2	1.05
October 31, 2016 - December 5, 2016	840	100.00%	447,513	580.0	4.1	2.15
Total in 2016	**2,112.00**	**1.00**	**1,013,008**	**1,770.00**	**16.30**	**4.96**
Total from startup	**114,061.50**	**0.95**	**129,827,827.00**	**NA**	**NA**	**1,619.13**

NOTES:

1. Up-time based as percentage of total reporting hours.
2. Treatment system operated by the Tyree Organization Ltd. from 9/02 - 9/03.
3. Treatment system operated by O&M Enterprises Inc. from 10/03 - 7/07.
4. Treatment system operated by Iyer Environmental Group from 7/07 to present.
5. VOC removal calculations are based on monthly water samples and assumes samples are representative of the entire reporting period.
6. VOC removal calculations assume that non-detect values = 0 ug/L.
7. Total VOCs summations include estimated "J" values.
8. VOC removal calculations are based on effluent totalizer readings.
9. "Influent VOCs" and "Effluent VOCs" values given above is the summation of values for individual compounds given in monthly analytical reports.
10. Unit conversion: 1 pound = 453.5924 grams, 1 gallon = 3.785 liters
11. Formula for the VOC removal calculation:

$(VOCs_{Influent} - VOCs_{Effluent})(ug/L) \cdot (1g/10^6 ug) \cdot (1\ lb/453.5924\ g) \cdot (Monthly\ process\ water)(gal) \cdot (3.785\ L/gallon)$

12. Using the 2/2/16 analytical results.

Table 2
Mr. C's Dry Cleaners Site Remediation
Site #915157
Effluent Discharge Criteria & Analytical Compliance Results

Parameter/Analyte	Daily Maximum[1]	Units	November - Effluent Analytical Values - Compliance
Flow (Average)	N/A	gpd	12,786
pH	6.0 - 9.0	standard units	8.10
1,1 Dichloroethene	10	µg/L	ND
1,1 Dichloroethane	10	µg/L	ND
cis-1,2-dichloroethene	10	µg/L	2.20
Trichloroethene	10	µg/L	ND
Tetrachloroethene	10	µg/L	1.90
Vinyl Chloride	10	µg/L	ND
Benzene	5	µg/L	ND
Ethylbenzene	5	µg/L	ND
Methylene Chloride	10	µg/L	ND
1,1,1 Trichloroethane	10	µg/L	ND
Toluene	5	µg/L	ND
Methyl-t-Butyl Ether (MTBE)	NA	ug/L	ND
o-Xylene[2]	5	µg/L	ND
m, p-Xylene[2]	10	µg/L	ND
Total Xylenes	NA	ug/L	ND
Iron, total[9]	600	µg/L	
Aluminum[9]	4,000	µg/L	
Copper[9]	48	µg/L	
Lead[9]	11	µg/L	
Manganese[9]	2,000	µg/L	
Silver[9]	100	µg/L	
Vanadium[9]	28	µg/L	
Zinc[9]	230	µg/L	
Total Dissolved Solids[9]	850	mg/L	
Total Suspended Solids[9]	20	mg/L	
Hardness	N/A	mg/L	360
Cyanide, Free[9]	10	µg/L	

NOTES:

1. "Daily Maximum" excerpted from Attachment E of Addendum 1 to the Construction Contract Documents dated October 2000.
2. Analytical report did not differentiate between o-Xylene and m, p-Xylene. Total Xylene value reported is given in each line.
3. Shaded cells indicate that analytical value exceeds the "Daily Maximum."
4. "ND" indicates that the compound was not detected and lists the practical quantitation limit in parentheses.
5. "NA" indicates that analyses were not performed and data is unavailable.
6. Average flows based on effluent readings: **October 31 - December 5, 2016 - 10,397 gallons per day.**
7. "J" indicates an estimated value below the detection limit.
8. "B" indicates analyte found in the associated blank.
9. Removed from the required analysis list by NYSDEC Region 9 in February 2005.
10. "NS" indicates that the parameter analysis was not sampled.

40 **Indicates non-compliance with the NYSDEC effluent discharge requirements**
NR **Indicates Not Reported by Lab**

Table 3
Mr. C's Dry Cleaners Site Remediation
NYSDEC Site #915157
November 2016 VOC Analytical Summary

Compound	Based on the November Effluent Analytical Results				
	Influent Concentration* (ug/L)		Effluent Concentration** (ug/L)		Cleanup Efficiency*** (%)
Acetone	ND (<20)	U	ND (<5.0)	U	NA
Benzene	ND (<4.0)	U	ND (<1.0)	U	NA
2-Butanone	ND (<20)	U	ND (<5.0)	U	NA
cis-1, 2-Dichloroethene	210		2.2		99.00%
Chloroform	ND (<4.0)	U	ND (<1.0)	U	NA
Chloromethane	ND (<4.0)	U	ND (<1.0)	U	NA
Methylene chloride	ND (<4.0)	U	ND (<1.0)	U	NA
Methyl tert-butyl ether (MTBE)	ND (<4.0)	U	ND (<1.0)	U	NA
Methyl acetate	ND (<4.0)	U	ND (<1.0)	U	NA
Tetrachloroethene (PCE)	310		1.9		99.40%
Toluene	ND (<4.0)	U	ND (<1.0)	U	NA
Trichloroethene (TCE)	46.0		ND (<1.0)	U	100.00%
Carbon Disulfide	ND (<4.0)	U	ND (<1.0)	U	NA
1,1,2 Trichloro-1,2,2-trifluororethane	ND (<4.0)	U	ND (<1.0)	U	NA
2-Hexanone	ND (<20)	U	ND (<5.0)	U	NA
4-Methyl-2-pentanone	ND (<20)	U	ND (<5.0)	U	NA
Cyclohexane	ND (<4.0)	U	ND (<1.0)	U	NA
trans-1,2-dichloroethene	ND (<4.0)	U	ND (<1.0)	U	NA
Chlorobenzene	ND (<4.0)	U	ND (<1.0)	U	NA
Methylcyclohexane	ND (<4.0)	U	ND (<1.0)	U	NA
Ethylbenzene	ND (<4.0)	U	ND (<1.0)	U	NA
Methyl acetate	ND (<4.0)	U	ND (<1.0)	U	NA
Vinyl Chloride	14		ND (<1.0)	U	100.00%
Total Xylenes	ND (<4.0)	U	ND (<1.0)	U	NA
• The 1st progress monitoring sampling of the groundwater wells associated with the "pilot" bioaugmentation program was performed on July 1-2, 2013.	**580.0**		**4.10**		**99.30%**

Notes:
1. "NA" = Not applicable
2. "U" = Compound analyzed, but was not detected. Detection limit in parentheses.
3. "DJ" or "J" indicates an estimated value below the practical quantitation limit but above the method detection limit.
4. Non-detect values are assumed to be equal to zero for calculation of monthly average concentrations.
5. "D" indicates the compound concentration was obtained form a secondary dilution analysis.
6. Acetone was not detected in the influent sample above the MDL but detected in the effluent sample. It is not a contaminant of concern for the Mr. C's site.

* Detection Limits (<10) and (<50)
** Detection Limits (<1) and (<5)
*** Contaminants of Concern only

Attachment A
IEG Summary of Field Activities
November 2016

10/31/16

11/14/16

11/28/16

12/5/16

MR. C's DRY CLEANERS SITE
NYSDEC Site #9-15-157
OM&M: SITE INSPECTION FORM

DATE: 31-Oct-16 ACTIVITIES: Site Inspection

INSPECTION PERSONNEL: R. Allen OTHER PERSONNEL:

WEATHER CONDITIONS: Partly cloudy, cool OUTSIDE TEMPERATURE (° F): 35

ARE WELL PUMPS OPERATING IN AUTO: YES: NO: If "NO", provide explanation below

~~PW-7 is OFF due to injection operation~~

PROVIDE WATER LEVEL READINGS ON CONTROL PANEL

RW-1	ON:		OFF: √	7 ft	PW-5	ON:		OFF: √	5 ft
PW-2	ON:		OFF: √	3 ft	PW-6	ON:		OFF: √	6 ft
PW-3	ON:		OFF: √	5 ft	PW-7	ON:	√	OFF:	13 ft
PW-4	ON:		OFF: √	4 ft	PW-8	ON:		OFF: √	6 ft

EQUALIZATION TANK: 3 ft Last Alarm D/T/Condition: 10/31/16 PW-2 Overload

NOTES:

INFLUENT FLOW RATE: 0 gpm INFLUENT TOTALIZER READING 12,236,479 gallons

SEQUESTERING AGENT DRUM LEVEL: 8 inches (x 1.7=) AMOUNT OF AGENT REMAINING: 13.5 gallons

SEQUESTERING AGENT FEED RATE: ml/min METERING PUMP PRESSURE: 4.0 psi

BAG FILTER PRESSURES:	Top	Bottom		Top	Bottom	
LEFT:	10 - 0	0	psi	RIGHT: 19 - 7	0	psi

INFLUENT FEED PUMP IN USE: #1 √ #2 INFLUENT PUMP PRESSURE: 7 psi

AIR STRIPPER BLOWER IN USE: #1 √ #2 AIR STRIPPER PRESSURE: 26.0 in. H_2O

AIR STRIPPER DIFFERENTIAL PRESSURE: broken in. H_2O DISCHARGE PRESSURE: 1.80 in. H_2O

AIR FLOW : 1350 fpm X 1.4 = 1890 CFM

EFFLUENT PUMP IN USE: #1 #2 √ EFFLUENT FEED PUMP PRESSURE: 9 psi

EFFLUENT FLOW RATE: 138 gpm EFFLUENT TOTALIZER READING: 81,056,073 | 672320 gallons

ARE BUILDING HEATERS IN USE? YES: √ NO: INSIDE TEMPERATURE (° F): 67

IS SUMP PUMP IN USE: YES: √ NO: ARE ANY LEAKS PRESENT? YES: √ NO:

WATER LEVEL IN SUMP: 5.5 in. TREATMENT BUILDING CLEAN & ORGANIZED? YES: √ NO:

MR. C's DRY CLEANERS SITE
NYSDEC Site #90150157
SITE INSPECTION FORM

31-Oct-16

SAMPLES COLLECTED? YES: _____ NO: √

	Sample ID	Time of Sampling	pH	Turbidity	Temp.	Sp. Cond.
AIR STRIPPER INFLUENT:						
AIR STRIPPER EFFLUENT:						

IS THERE EVIDENCE OF TAMPERING/VANDALISM OF WELLS: ? YES: _____ NO: √

WERE MANHOLES INSPECTED? YES: √ NO: _____

WERE ELECTRICAL BOXES INSPECTED? YES: √ NO: _____

IS WATER PRESENT IN ANY MANHOLES OR ELECTRICAL BOXES? YES: _____ NO: √

If yes, provide manhole/electric box ID and description of any corrective measures below:

PZ-4D inner ring is corroded and collapsing.

SUBSLAB SYSTEM

MANOMETER: 1.4 **in. WC** (Fan Inlet)

	west	east
FLOW (fpm):		
FLOW (cfm):		
VACUUM GAUGE (in WC)		

NOTES: cfm = 0.05 x fpm (3" PVC)

INCLUDE REMARKS & DESCRIBE ANY OTHER SYSTEM MAINTENANCE PERFORMED ON MR. C's SITE

Remarks: Two Air Stripper float fittings have slow drip leaks.

Effluent Pipe has (2) slow drip leaks near EQ Tank.

Other Actions: Drained (2) SVE Systems as needed: little condensate

Reduced Jesco Pump settings to: Left 3.0; Right 3.0.

AGWAY

Remarks: Site is empty of materials and has been graded and graveled.

Other Actions:

MR. C's DRY CLEANERS SITE
NYSDEC Site #9-15-157
OM&M: SITE INSPECTION FORM

DATE: Nov 14,2016 ACTIVITIES: Site Inspection

INSPECTION PERSONNEL: R. Allen OTHER PERSONNEL: ------

WEATHER CONDITIONS: Partly cloudy, warm OUTSIDE TEMPERATURE (° F): 50

ARE WELL PUMPS OPERATING IN AUTO: YES: √ NO: If "NO", provide explanation below

~~PW-7 is OFF due to maintenance problem~~

PROVIDE WATER LEVEL READINGS ON CONTROL PANEL

RW-1	ON:		OFF: √	6 ft	PW-5	ON:		OFF: √	5 ft
PW-2	ON:		OFF: √	7 ft	PW-6	ON:		OFF: √	4 ft
PW-3	ON:		OFF: √	7 ft	PW-7	ON:	√	OFF:	13 ft
PW-4	ON:		OFF: √	6 ft	PW-8	ON:		OFF: √	3 ft

EQUALIZATION TANK: 4 ft Last Alarm D/T/Condition: 11/14/16 PW-7 Overload

NOTES:

INFLUENT FLOW RATE: 28 gpm INFLUENT TOTALIZER READING 12,461,068 gallons

SEQUESTERING AGENT DRUM LEVEL: 18 inches (x 1.7=) AMOUNT OF AGENT REMAINING: 30.5 gallons

SEQUESTERING AGENT FEED RATE: ml/min METERING PUMP PRESSURE: 4.0 psi

BAG FILTER PRESSURES:	Top	Bottom		Top	Bottom	
LEFT:	25 - 0	0	psi	RIGHT: 31 - 8	0	psi

INFLUENT FEED PUMP IN USE: #1 √ #2 INFLUENT PUMP PRESSURE: 7 psi

AIR STRIPPER BLOWER IN USE: #1 √ #2 AIR STRIPPER PRESSURE: 28.0 in. H_2O

AIR STRIPPER DIFFERENTIAL PRESSURE: broken in. H_2O DISCHARGE PRESSURE: 1.50 in. H_2O

AIR FLOW : 1250 fpm X 1.4 = 1750 CFM

EFFLUENT PUMP IN USE: #1 #2 √ EFFLUENT FEED PUMP PRESSURE: 9 psi

EFFLUENT FLOW RATE: 140 gpm EFFLUENT TOTALIZER READING: 81,235,979 | 855340 gallons

ARE BUILDING HEATERS IN USE? YES: √ NO: INSIDE TEMPERATURE (° F): 67

IS SUMP PUMP IN USE: YES: √ NO: ARE ANY LEAKS PRESENT? YES: √ NO:

WATER LEVEL IN SUMP: 7.5 in. TREATMENT BUILDING CLEAN & ORGANIZED? YES: √ NO:

MR. C's DRY CLEANERS SITE
NYSDEC Site #90150157
SITE INSPECTION FORM

Nov 14,2016

SAMPLES COLLECTED? YES: _____ NO: √

	Sample ID	Time of Sampling	pH	Turbidity	Temp.	Sp. Cond.
AIR STRIPPER INFLUENT:						
AIR STRIPPER EFFLUENT:						

IS THERE EVIDENCE OF TAMPERING/VANDALISM OF WELLS: ? YES: _____ NO: √

WERE MANHOLES INSPECTED? YES: √ NO: _____

WERE ELECTRICAL BOXES INSPECTED? YES: √ NO: _____

IS WATER PRESENT IN ANY MANHOLES OR ELECTRICAL BOXES? YES: _____ NO: √

If yes, provide manhole/electric box ID and description of any corrective measures below:

PZ-4D inner ring is corroded and collapsing.

SUBSLAB SYSTEM

MANOMETER: 1.4 **in. WC** (Fan Inlet)

	west	east
FLOW (fpm):		
FLOW (cfm):		
VACUUM GAUGE (in WC)		

NOTES: cfm = 0.05 x fpm (3" PVC)

INCLUDE REMARKS & DESCRIBE ANY OTHER SYSTEM MAINTENANCE PERFORMED ON MR. C's SITE

Remarks: Two Air Stripper float fittings have slow drip leaks.

Effluent Pipe has (2) slow drip leaks near EQ Tank.

Other Actions: Treatment Room SVE System - drained condensate

586 Building SVE System - drained condensate

PW-7 stays ON and water level remains at 13. Turned pump OFF.

AGWAY

Remarks: Site is empty of materials and has been graded and graveled.

Other Actions:

MR. C's DRY CLEANERS SITE
NYSDEC Site #9-15-157
OM&M: SITE INSPECTION FORM

DATE: 28-Nov-16 ACTIVITIES: Site Inspection

INSPECTION PERSONNEL: R. Allen OTHER PERSONNEL: ——

WEATHER CONDITIONS: Partly cloudy, cool OUTSIDE TEMPERATURE (° F): 40

ARE WELL PUMPS OPERATING IN AUTO: YES: _____ NO: √ If "NO", provide explanation below

PW-7 is OFF due to maintenance problem

PROVIDE WATER LEVEL READINGS ON CONTROL PANEL

RW-1	ON: _____	OFF: √	3 ft	PW-5	ON: _____	OFF: √	7 ft
PW-2	ON: _____	OFF: √	7 ft	PW-6	ON: _____	OFF: √	7 ft
PW-3	ON: _____	OFF: √	5 ft	PW-7	ON: √	OFF: _____	13 ft
PW-4	ON: _____	OFF: √	3 ft	PW-8	ON: _____	OFF: √	7 ft

EQUALIZATION TANK: 4 ft Last Alarm D/T/Condition: 11/28/16 PW-2 Overload

NOTES: _____

INFLUENT FLOW RATE: 0 gpm INFLUENT TOTALIZER READING 12,677,377 gallons

SEQUESTERING AGENT DRUM LEVEL: 32 inches (x 1.7=) AMOUNT OF AGENT REMAINING: 54.5 gallons

SEQUESTERING AGENT FEED RATE: _____ ml/min METERING PUMP PRESSURE: 4.0 psi

	Top	Bottom		Top	Bottom	
BAG FILTER PRESSURES:	LEFT: 18 - 0	0	psi	RIGHT: 24 - 8	0	psi

INFLUENT FEED PUMP IN USE: #1 √ #2 _____ INFLUENT PUMP PRESSURE: 7 psi

AIR STRIPPER BLOWER IN USE: #1 √ #2 _____ AIR STRIPPER PRESSURE: 35.0 in. H_2O

AIR STRIPPER DIFFERENTIAL PRESSURE: broken in. H_2O DISCHARGE PRESSURE: 0.70 in. H_2O

AIR FLOW : 1200 fpm X 1.4 = 1680 CFM

EFFLUENT PUMP IN USE: #1 _____ #2 √ EFFLUENT FEED PUMP PRESSURE: 9 psi

EFFLUENT FLOW RATE: 142 gpm EFFLUENT TOTALIZER READING: 81,412,036 | 34060 gallons

ARE BUILDING HEATERS IN USE? YES: _____ NO: √ INSIDE TEMPERATURE (° F): 70

IS SUMP PUMP IN USE: YES: √ NO: _____ ARE ANY LEAKS PRESENT? YES: √ NO: _____

WATER LEVEL IN SUMP: 6.0 in. TREATMENT BUILDING CLEAN & ORGANIZED? YES: √ NO: _____

MR. C's DRY CLEANERS SITE
NYSDEC Site #90150157
SITE INSPECTION FORM

28-Nov-16

SAMPLES COLLECTED? YES: _____ NO: √

	Sample ID	Time of Sampling	pH	Turbidity	Temp.	Sp. Cond.
AIR STRIPPER INFLUENT:						
AIR STRIPPER EFFLUENT:						

IS THERE EVIDENCE OF TAMPERING/VANDALISM OF WELLS: ? YES: _____ NO: √

WERE MANHOLES INSPECTED? YES: √ NO: _____

WERE ELECTRICAL BOXES INSPECTED? YES: √ NO: _____

IS WATER PRESENT IN ANY MANHOLES OR ELECTRICAL BOXES? YES: _____ NO: √

If yes, provide manhole/electric box ID and description of any corrective measures below:

PZ-4D inner ring is corroded and collapsing.

SUBSLAB SYSTEM

MANOMETER: 1.5 **in. WC** (Fan Inlet)

	west	east
FLOW (fpm):		
FLOW (cfm):		
VACUUM GAUGE (in WC)		

NOTES: cfm = 0.05 x fpm (3" PVC)

INCLUDE REMARKS & DESCRIBE ANY OTHER SYSTEM MAINTENANCE PERFORMED ON MR. C's SITE

Remarks: One Air Stripper float fitting has slow drip leak.

Effluent Pipe has (2) slow drip leaks near EQ Tank.

Other Actions: Treatment Room SVE System - drained condensate

586 Building SVE System - drained condensate

Air Stripper rubber access port cover was off. Reinstalled port cover and checked all others.

AGWAY

Remarks: Site is empty of materials and has been graded and graveled.

Other Actions:

MR. C's DRY CLEANERS SITE
NYSDEC Site #9-15-157
OM&M: SITE INSPECTION FORM

DATE: 5-Dec-16 ACTIVITIES: Site Inspection

INSPECTION PERSONNEL: R. Allen OTHER PERSONNEL:

WEATHER CONDITIONS: Cloudy, cool OUTSIDE TEMPERATURE (° F): 40

ARE WELL PUMPS OPERATING IN AUTO: YES: NO: √ If "NO", provide explanation below

~~PW-7 is OFF due to maintenance problem~~

PROVIDE WATER LEVEL READINGS ON CONTROL PANEL

RW-1	ON: √	OFF:	5	ft	PW-5	ON:	OFF: √	5	ft
PW-2	ON:	OFF: √	3	ft	PW-6	ON:	OFF: √	5	ft
PW-3	ON:	OFF: √	6	ft	PW-7	ON: √	OFF:	13	ft
PW-4	ON: √	OFF:	3	ft	PW-8	ON:	OFF: √	7	ft

EQUALIZATION TANK: 3 ft Last Alarm D/T/Condition: 12/5/16 PW-2 Overload

NOTES:

INFLUENT FLOW RATE: 10 gpm INFLUENT TOTALIZER READING 12,791,614 gallons

SEQUESTERING AGENT DRUM LEVEL: 4 inches (x 1.7=) AMOUNT OF AGENT REMAINING: 7 gallons

SEQUESTERING AGENT FEED RATE: ml/min METERING PUMP PRESSURE: 4.0 psi

		Top	Bottom		Top	Bottom
BAG FILTER PRESSURES:	LEFT:	0	0 psi	RIGHT:	7	0 psi

INFLUENT FEED PUMP IN USE: #1 √ #2 INFLUENT PUMP PRESSURE: 7 psi

AIR STRIPPER BLOWER IN USE: #1 √ #2 AIR STRIPPER PRESSURE: 41.0 in. H_2O

AIR STRIPPER DIFFERENTIAL PRESSURE: Broken in. H_2O DISCHARGE PRESSURE: 0.30 in. H_2O

AIR FLOW : 900 fpm X 1.4 = 1260 CFM

EFFLUENT PUMP IN USE: #1 #2 √ EFFLUENT FEED PUMP PRESSURE: 10 psi

EFFLUENT FLOW RATE: 140 gpm EFFLUENT TOTALIZER READING: 81,503,586 | 126720 gallons

ARE BUILDING HEATERS IN USE? YES: √ NO: INSIDE TEMPERATURE (° F): 67

IS SUMP PUMP IN USE: YES: √ NO: ARE ANY LEAKS PRESENT? YES: √ NO:

WATER LEVEL IN SUMP: 7.5 in. TREATMENT BUILDING CLEAN & ORGANIZED? YES: √ NO:

MR. C's DRY CLEANERS SITE
NYSDEC Site #90150157
SITE INSPECTION FORM

12-Dec-16

SAMPLES COLLECTED? **YES:** √ **NO:** _____

	Sample ID	Time of Sampling	pH	Turbidity	Temp.	Sp. Cond.
AIR STRIPPER INFLUENT:	INF	2:30 PM	7.50	4.74	13.3	1903
AIR STRIPPER EFFLUENT:	EFF	2:30 PM	8.52	3.22	13.9	1979

IS THERE EVIDENCE OF TAMPERING/VANDALISM OF WELLS: ?	**YES:** _____	**NO:** √
WERE MANHOLES INSPECTED?	**YES:** √	**NO:** _____
WERE ELECTRICAL BOXES INSPECTED?	**YES:** √	**NO:** _____
IS WATER PRESENT IN ANY MANHOLES OR ELECTRICAL BOXES?	**YES:** _____	**NO:** √

If yes, provide manhole/electric box ID and description of any corrective measures below:

PZ-4D inner ring is corroded and collapsing.

SUBSLAB SYSTEM

MANOMETER: 1.5 **in. WC** (Fan Inlet)

	west	east
FLOW (fpm):		
FLOW (cfm):		
VACUUM GAUGE (in WC)		

NOTES: cfm = 0.05 x fpm (3" PVC)

INCLUDE REMARKS & DESCRIBE ANY OTHER SYSTEM MAINTENANCE PERFORMED ON MR. C's SITE

Remarks: One Air Stripper float fitting has slow drip leak.

Effluent Pipe has (2) slow drip leaks near EQ Tank.

Other Actions: Treatment Room SVE System - drained condensate

586 Building SVE System - drained condensate

AGWAY

Remarks: Site is empty of materials and has been graded and graveled.

Other Actions:

Mr. C's CLEANERS OM&M

SUMMARY OF FIELD ACTIVITIES BY IEG - 11/2016

DATE	ACTIVITY
1-Nov	Change Bag Filters. Get Supplies.
2-Nov	End of month summaries. OM&M office work.
7-Nov	OM&M Weekly Inspection. Inspect and drain SVE Systems as needed. Instal larger SVE condensate jug. Sweep Library Parking Lot around well groups. Cut debris trench around Library Parking Lot.
10-Nov	PW-5 - inspect, clean and test. Get Supplies.
11-Nov	PW-7 - inspect, clean and test. Sweep Library Parking Lot around well groups.
14-Nov	OM&M Weekly Inspection. Inspect and drain SVE Systems as needed.
16-Nov	Inspect and drain SVE systems as needed. Change bag filters.
18-Nov	Check system
21-Nov	OM&M Weekly Inspection. Inspect and drain SVE Systems as needed.
22-Nov	Piezometer Readings.
26-Nov	Check system
28-Nov	OM&M Weekly Inspection. Inspect and drain SVE Systems as needed.
30-Nov	Piezometer Readings.

Mr. C's CLEANERS OM&M
STATUS OF FIELD ACTIVITIES BY IEG - 11/2016

ACTIVITY	DESCRIPTION	COMPLETION DATE/STATUS
PW-4 UE Level	Asphalt around Underground Enclosure has sunk, leaving it vulnerable to damage. Bring parking lot up to level with asphalt patch.	in progress
Rebuild JAC Pump as needed	Jesco America Corp recommends rebuilding the Redux pump when needed. Purchased rebuild kit.	in progress
Brace Effluent Pipe	David Szymanski (NYSDEC) inspected Treatment Room and said that the effluent pipe should be braced in (3) places to the north wall.	Sep-16
Inspect and clean Manholes	Inspect manholes near operating pumps. Pump out water in manholes and clean out remaining sediment and other material.	in progress
Cool Treatment Room	Temperature in Treatment Room is well above 90 degrees during the summer months. Need to increase outside air inflow to the room.	in progress
Filter Housings are corroded	Flanges that seal filter baskets inside Rosedale Filter Housings are corroded. Sediment flows around filters instead of being trapped. Replace seals in existing housings and patch as needed (short term). Replace housings (long term).	in progress
Replace Air Stripper Latches	Around (6) latches on the Air Stripper trays are loose or broken. Reattach keepers with JB Weld. Replace broken latches and springs with new parts.	in progress
Repair Leaking Ball Valve	Influent ball valve east of EQ Tank drips. Inspect/clean & replace if necessary.	in progress
PZ-1B has damage	PZ-2B has surface concrete damage from severe winter conditions this year. Repair chipped concrete with epoxy material.	Sep-16
Redux usage rapidly increased	The rate of Redux usage increased rapidly during the past several months despite turning the Jesco Pump settings to their lowest levels. Clean pump and test. Adjust clamps on Redux line. Replace pump if necessary.	in progress
Reduce Influent Pump Rate	Lab Tests have shown high levels of VOCs. Try lengthening the time that the Influent Pump runs to increase the Air Sparging time inside the Air Stripper	in progress
Add Air Sparging System	Lab Tests have shown high levels of VOCs. Try adding an Air Sparging system to the sump box of the Air Stripper to increase the treatment of the effluent.	in progress
South Wall should be sealed	South Wall of Treatment Room has leaked into the neighboring unit several times when there have been water related problems. Trim wall insullation matting to reduce moisture retension. Seal base of wall with silicone caulking.	in progress
SVE Fan pipe collects water	The SVE Fan pipe on Building 586 collects water. There is a plug just below the fan to drain water out of the horizontal section of the pipe. Inspect system and make corrections to prevent the pipe from filling with water.	in progress
Repair PZ-4B	Inner ring of piezometer was severely damaged by Town's snowplow truck. Talked to Town - they will address problem in Spring. Inner ring must be replaced.	Oct-16
EE-4 Paved Over	During the Aug 2016 paving of the north half of the parking lot, Piezometer EE-4 was covered. Locate piezometer and remove asphalt to expose it.	in progress
Product in PZ-7D	During Winter 2016 Piezometer Readings product was found in PZ-7D. Remove product to prevent spread.	in progress
PZ-6A and PZ-6B have concrete damage	PZ-6A and PZ-6B have concrete damage from snowplowing. Repair damaged concrete with epoxy material.	Sep-16
Instal Liquid Containment Trench	Southeast section of Treatment Room experienced several water leaks in the past. A shallow trench should be cut into floor slab to direct slow leaks into sump box.	Oct-16
Air Stripper Leaks	Air Stripper leaked at several places when system was restarted. The unit is corroded in many areas. Find and seal leaks in corroded metal with epoxy. Seal leaks around rubber gaskets with caulk.	Oct-16
PW-4 Transducer does not read accurately	PanelView level for this well is not accurate. Inspect well to find and repair the problem with the transducer and / or wiring.	Oct-16
PZ-4D Inner Ring is corroded through	The inner ring of this piezometer is corroded through causing the box to slowly collapse. Replace the road box of this piezometer.	in progress
PW-2, PW-3 and PW-4 inspections	These well pumps were due for an inspection and cleaning. Pull well pumps up and clean transducers and pumps. Purge vertical pipes as needed.	Oct-16
PW-5 and PW-7 inspections	These well pumps were due for an inspection and cleaning. Pull well pumps up and clean transducers and pumps. Purge vertical pipes as needed.	Nov-16
PanelView False Alarm Record	The PanelView constantly records PW-2 OVERLOAD. The well pump runs fine and the Alarm Light on the Main Control Panel does not come on. Reset PanelView to correct for this constant record.	in progress

Mr. C's CLEANERS OM&M

SUMMARY OF WATER PUMP MAINTENANCE BY IEG - 2016

as of Nov 2016

ID	CLEAN & INSPECT PUMP	REPLACED PUMP	REPAIR PUMP	PITLESS ADAPTER	INNER RING	HORIZONTAL PIPE	CHECK VALVE	CLEAN & INSPECT TRANSDUCER	REPLACE TRANSDUCER	PUMP OUT WELL	PIEZOMETERS	REPLACE ANEROID BELLOWS	CLEAN OUT & INSPECT ELECTRICAL BOX	ELECTRICAL BOX REPAIR
RW - 1	Jan 08, May 10, Jan 12, Oct 15	Feb 08, Jan 12	May 10, Nov 08					May 10, Jan 12, Oct 15			PZ-1B repaired Sep 16			
PW - 2	Jun 08, Aug 09, May 10, Apr 13, Sep 15, Oct 16	Jul 08, Apr 13 Dec 15				Sep-15		Nov 11, May 10, Apr 13 Dec 15, Oct 16	Sep 09, Dec 11	Aug-09			Nov-11	Sep-09
PW - 3	Jun 08, Aug 09, May 10, Sep 15, Oct 16	Jul 08, Dec 11, Oct 15		Repair adapter		Sep-15		Aug 09, Nov 11, Oct 15, Oct 16	Dec 11, Sep 15	Aug-09			Nov 11, Sep 15	
PW - 4	Dec 07, May 08, Sep 09, May 10, Jan 12, Oct 15, Oct 16	Dec 07, Jan 12	Sep-13		Aug 13	Oct-16		May 10, Nov 11, Oct 15, Oct 16	Dec 11, Mar 08, Sep 08	Jul 09, Sep 09	PZ-4B replaced Sep 16	Oct 16	Sep 09, Nov 11, Oct 16	Sep-09
PW - 5	Jan 12, May 08, Oct 15, Nov 16	Jul 08, Jan 12				Nov-16		Mar 11, Oct 15, Nov 16	Jan 12, Sep 08				Jan-12	
PW - 6	Jun 08, Jul 09, Jul 12, Nov 12, Aug 15	Jun 08, Jul 09, Aug 12, Nov 12, Sep 15		Replaced Aug 15		Jul 12, Nov 12, Sep 15	Aug 15	Aug 09, Jul 12, Dec 12, Apr 13, Aug 15	Sep 09, Sep 15	Aug-09	PZ-6A, PZ-6C repaired Sep 16	Aug 15	Aug 09, Sep 09, Sep 15	Jul 09, Sep 09
PW - 7	Jun 08, Jul 09, May 10, Oct 10, Aug 11, Mar 12, Jul 12, Nov 12, Aug 15, Nov 11	Nov 07, Jul 09, Oct 10, Nov 12		Replaced Aug 15		Jul 12, Nov 12, Nov 16	Aug 15	Oct 10, Aug 11, Mar 12, Jul 12, Dec 12, Aug 15, Nov 16		Aug 09, May 10, Aug 11				
PW - 8	Jun 08, Aug 09, May 10, Aug 11, Jul 12, Dec 12, Aug 15	Jul 08, Sep 09, Aug 11, Dec 12		Replaced Aug 15		Pipe 8/09, Jul 12, Sep 15	Aug 15	May 10, Aug 11, Jul 12, Dec 12, Apr 13, Aug 15		Aug 09, May 10, Aug 11		Aug 15	Apr 13, Aug 15	Apr-13

Mr. C's CLEANERS OM&M

SUMMARY OF WATER PUMP STATUS - 2016

as of Nov 2016

ID	NEEDS CLEANING & INSPECTION	NEEDS NEW PUMP	NEEDS NEW INNER RING	NEEDS P.A. OR PIPE	NEEDS WELL CLEAN-OUT	PITLESS ADAPTER	NEEDS HORIZONTAL LINE PURGE	NEEDS CHECK VALVE INSPECTION	NEEDS TRANSDUCER INSPECTION	NEEDS NEW TRANSDUCER	NEEDS ANEROID BELLOWS	NEEDS U.E. CLEANED	NEEDS U.E. REPAIR
RW-1	YES	NO	PZ-1B		**YES**				NO	NO	NO	NO	YES - bolts
PW-2	NO	NO	NO		**NO**				NO	NO	NO	NO	YES - bolts
PW-3	NO	NO	NO						NO	NO	NO	NO	NO
PW-4	NO	NO	NO				NO		NO	NO	NO	NO	YES - Asphalt patch
PW-5	NO	NO	NO		N)		NO		NO	NO		NO	NO
PW-6	YES	NO	NO				NO		NO	NO	NO	NO	DONE
PW-7	YES		NO		NO		NO		NO			NO	NO
PW-8	YES	NO	NO		NO		NO		NO	NO	NO	NO	NO

Attachment B
Analytical Report from
Spectrum Analytical Laboratories

Analytical Data Package Work Order ID: R1104
Sampled by IEG: December 5, 2016

Eurofins Spectrum Analytical, Inc. -- ESAI-RI

12/08/2016

Client: Ecology and Environment Engineering P.C.
Client Sample ID: INFLUENT
Lab ID: R1104-01

Project: Mr. C's Dry Cleaning
Collection Date: 12/05/2016 15:00

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SW846 8260C -- VOC by GC-MS							**SW8260_W**
Dichlorodifluoromethane	ND		4.0	ug/L	4	12/07/2016 21:30	85927
Chloromethane	ND		4.0	ug/L	4	12/07/2016 21:30	85927
Vinyl chloride	14		4.0	ug/L	4	12/07/2016 21:30	85927
Bromomethane	ND		4.0	ug/L	4	12/07/2016 21:30	85927
Chloroethane	ND		4.0	ug/L	4	12/07/2016 21:30	85927
Trichlorofluoromethane	ND		4.0	ug/L	4	12/07/2016 21:30	85927
1,1-Dichloroethene	ND		4.0	ug/L	4	12/07/2016 21:30	85927
Acetone	ND		20	ug/L	4	12/07/2016 21:30	85927
Carbon disulfide	ND		4.0	ug/L	4	12/07/2016 21:30	85927
Methylene chloride	ND		4.0	ug/L	4	12/07/2016 21:30	85927
trans-1,2-Dichloroethene	ND		4.0	ug/L	4	12/07/2016 21:30	85927
Methyl tert-butyl ether	ND		4.0	ug/L	4	12/07/2016 21:30	85927
1,1-Dichloroethane	ND		4.0	ug/L	4	12/07/2016 21:30	85927
2-Butanone	ND		20	ug/L	4	12/07/2016 21:30	85927
cis-1,2-Dichloroethene	210		4.0	ug/L	4	12/07/2016 21:30	85927
Chloroform	ND		4.0	ug/L	4	12/07/2016 21:30	85927
1,1,1-Trichloroethane	ND		4.0	ug/L	4	12/07/2016 21:30	85927
Carbon tetrachloride	ND		4.0	ug/L	4	12/07/2016 21:30	85927
1,2-Dichloroethane	ND		4.0	ug/L	4	12/07/2016 21:30	85927
Benzene	ND		4.0	ug/L	4	12/07/2016 21:30	85927
Trichloroethene	46		4.0	ug/L	4	12/07/2016 21:30	85927
1,2-Dichloropropane	ND		4.0	ug/L	4	12/07/2016 21:30	85927
Bromodichloromethane	ND		4.0	ug/L	4	12/07/2016 21:30	85927
cis-1,3-Dichloropropene	ND		4.0	ug/L	4	12/07/2016 21:30	85927
4-Methyl-2-pentanone	ND		20	ug/L	4	12/07/2016 21:30	85927
Toluene	ND		4.0	ug/L	4	12/07/2016 21:30	85927
trans-1,3-Dichloropropene	ND		4.0	ug/L	4	12/07/2016 21:30	85927
1,1,2-Trichloroethane	ND		4.0	ug/L	4	12/07/2016 21:30	85927
Tetrachloroethene	310		4.0	ug/L	4	12/07/2016 21:30	85927
2-Hexanone	ND		20	ug/L	4	12/07/2016 21:30	85927
Dibromochloromethane	ND		4.0	ug/L	4	12/07/2016 21:30	85927
1,2-Dibromoethane	ND		4.0	ug/L	4	12/07/2016 21:30	85927
Chlorobenzene	ND		4.0	ug/L	4	12/07/2016 21:30	85927
Ethylbenzene	ND		4.0	ug/L	4	12/07/2016 21:30	85927
Xylene (Total)	ND		4.0	ug/L	4	12/07/2016 21:30	85927
Styrene	ND		4.0	ug/L	4	12/07/2016 21:30	85927
Bromoform	ND		4.0	ug/L	4	12/07/2016 21:30	85927
Isopropylbenzene	ND		4.0	ug/L	4	12/07/2016 21:30	85927

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

Eurofins Spectrum Analytical, Inc. -- ESAI-RI

12/08/2016

Client: Ecology and Environment Engineering P.C.
Client Sample ID: INFLUENT
Lab ID: R1104-01

Project: Mr. C's Dry Cleaning
Collection Date: 12/05/2016 15:00

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SW846 8260C -- VOC by GC-MS							**SW8260_W**
1,1,2,2-Tetrachloroethane	ND		4.0	ug/L	4	12/07/2016 21:30	85927
1,3-Dichlorobenzene	ND		4.0	ug/L	4	12/07/2016 21:30	85927
1,4-Dichlorobenzene	ND		4.0	ug/L	4	12/07/2016 21:30	85927
1,2-Dichlorobenzene	ND		4.0	ug/L	4	12/07/2016 21:30	85927
1,2-Dibromo-3-chloropropane	ND		4.0	ug/L	4	12/07/2016 21:30	85927
1,2,4-Trichlorobenzene	ND		4.0	ug/L	4	12/07/2016 21:30	85927
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.0	ug/L	4	12/07/2016 21:30	85927
Cyclohexane	ND		4.0	ug/L	4	12/07/2016 21:30	85927
Methyl acetate	ND		4.0	ug/L	4	12/07/2016 21:30	85927
Methylcyclohexane	ND		4.0	ug/L	4	12/07/2016 21:30	85927
Surrogate: Dibromofluoromethane	103		85-115	%REC	4	12/07/2016 21:30	85927
Surrogate: 1,2-Dichloroethane-d4	103		70-120	%REC	4	12/07/2016 21:30	85927
Surrogate: Toluene-d8	96.9		85-120	%REC	4	12/07/2016 21:30	85927
Surrogate: Bromofluorobenzene	94.0		75-120	%REC	4	12/07/2016 21:30	85927

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

Eurofins Spectrum Analytical, Inc. -- ESAI-RI

12/08/2016

Client: Ecology and Environment Engineering P.C.
Client Sample ID: EFFLUENT
Lab ID: R1104-02

Project: Mr. C's Dry Cleaning
Collection Date: 12/05/2016 15:00

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SW846 8260C -- VOC by GC-MS							**SW8260_W**
Dichlorodifluoromethane	ND		1.0	ug/L	1	12/07/2016 19:26	85927
Chloromethane	ND		1.0	ug/L	1	12/07/2016 19:26	85927
Vinyl chloride	ND		1.0	ug/L	1	12/07/2016 19:26	85927
Bromomethane	ND		1.0	ug/L	1	12/07/2016 19:26	85927
Chloroethane	ND		1.0	ug/L	1	12/07/2016 19:26	85927
Trichlorofluoromethane	ND		1.0	ug/L	1	12/07/2016 19:26	85927
1,1-Dichloroethene	ND		1.0	ug/L	1	12/07/2016 19:26	85927
Acetone	ND		5.0	ug/L	1	12/07/2016 19:26	85927
Carbon disulfide	ND		1.0	ug/L	1	12/07/2016 19:26	85927
Methylene chloride	ND		1.0	ug/L	1	12/07/2016 19:26	85927
trans-1,2-Dichloroethene	ND		1.0	ug/L	1	12/07/2016 19:26	85927
Methyl tert-butyl ether	ND		1.0	ug/L	1	12/07/2016 19:26	85927
1,1-Dichloroethane	ND		1.0	ug/L	1	12/07/2016 19:26	85927
2-Butanone	ND		5.0	ug/L	1	12/07/2016 19:26	85927
cis-1,2-Dichloroethene	2.2		1.0	ug/L	1	12/07/2016 19:26	85927
Chloroform	ND		1.0	ug/L	1	12/07/2016 19:26	85927
1,1,1-Trichloroethane	ND		1.0	ug/L	1	12/07/2016 19:26	85927
Carbon tetrachloride	ND		1.0	ug/L	1	12/07/2016 19:26	85927
1,2-Dichloroethane	ND		1.0	ug/L	1	12/07/2016 19:26	85927
Benzene	ND		1.0	ug/L	1	12/07/2016 19:26	85927
Trichloroethene	ND		1.0	ug/L	1	12/07/2016 19:26	85927
1,2-Dichloropropane	ND		1.0	ug/L	1	12/07/2016 19:26	85927
Bromodichloromethane	ND		1.0	ug/L	1	12/07/2016 19:26	85927
cis-1,3-Dichloropropene	ND		1.0	ug/L	1	12/07/2016 19:26	85927
4-Methyl-2-pentanone	ND		5.0	ug/L	1	12/07/2016 19:26	85927
Toluene	ND		1.0	ug/L	1	12/07/2016 19:26	85927
trans-1,3-Dichloropropene	ND		1.0	ug/L	1	12/07/2016 19:26	85927
1,1,2-Trichloroethane	ND		1.0	ug/L	1	12/07/2016 19:26	85927
Tetrachloroethene	1.9		1.0	ug/L	1	12/07/2016 19:26	85927
2-Hexanone	ND		5.0	ug/L	1	12/07/2016 19:26	85927
Dibromochloromethane	ND		1.0	ug/L	1	12/07/2016 19:26	85927
1,2-Dibromoethane	ND		1.0	ug/L	1	12/07/2016 19:26	85927
Chlorobenzene	ND		1.0	ug/L	1	12/07/2016 19:26	85927
Ethylbenzene	ND		1.0	ug/L	1	12/07/2016 19:26	85927
Xylene (Total)	ND		1.0	ug/L	1	12/07/2016 19:26	85927
Styrene	ND		1.0	ug/L	1	12/07/2016 19:26	85927
Bromoform	ND		1.0	ug/L	1	12/07/2016 19:26	85927
Isopropylbenzene	ND		1.0	ug/L	1	12/07/2016 19:26	85927

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

Eurofins Spectrum Analytical, Inc. -- ESAI-RI

12/08/2016

Client: Ecology and Environment Engineering P.C.
Client Sample ID: EFFLUENT
Lab ID: R1104-02

Project: Mr. C's Dry Cleaning
Collection Date: 12/05/2016 15:00

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SW846 8260C -- VOC by GC-MS							**SW8260_W**
1,1,2,2-Tetrachloroethane	ND		1.0	ug/L	1	12/07/2016 19:26	85927
1,3-Dichlorobenzene	ND		1.0	ug/L	1	12/07/2016 19:26	85927
1,4-Dichlorobenzene	ND		1.0	ug/L	1	12/07/2016 19:26	85927
1,2-Dichlorobenzene	ND		1.0	ug/L	1	12/07/2016 19:26	85927
1,2-Dibromo-3-chloropropane	ND		1.0	ug/L	1	12/07/2016 19:26	85927
1,2,4-Trichlorobenzene	ND		1.0	ug/L	1	12/07/2016 19:26	85927
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	ug/L	1	12/07/2016 19:26	85927
Cyclohexane	ND		1.0	ug/L	1	12/07/2016 19:26	85927
Methyl acetate	ND		1.0	ug/L	1	12/07/2016 19:26	85927
Methylcyclohexane	ND		1.0	ug/L	1	12/07/2016 19:26	85927
Surrogate: Dibromofluoromethane	98.9		85-115	%REC	1	12/07/2016 19:26	85927
Surrogate: 1,2-Dichloroethane-d4	97.6		70-120	%REC	1	12/07/2016 19:26	85927
Surrogate: Toluene-d8	101		85-120	%REC	1	12/07/2016 19:26	85927
Surrogate: Bromofluorobenzene	97.4		75-120	%REC	1	12/07/2016 19:26	85927

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

Eurofins Spectrum Analytical, Inc. -- ESAI-RI

12/08/2016

Client: Ecology and Environment Engineering P.C.
Client Sample ID: INFLUENT
Lab ID: R1104-01

Project: Mr. C's Dry Cleaning
Collection Date: 12/05/2016 15:00

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SM 4500 H+ B -- pH VALUE							**SM4500_H+**
pH	7.9		1.0	S.U.	1	12/06/2016 10:10	R97222
The pH value was measured at the temperature of	20			C	1	12/06/2016 10:10	R97222

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

Eurofins Spectrum Analytical, Inc. -- ESAI-RI

12/08/2016

Client: Ecology and Environment Engineering P.C.
Client Sample ID: EFFLUENT
Lab ID: R1104-02

Project: Mr. C's Dry Cleaning
Collection Date: 12/05/2016 15:00

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SM 4500 H+ B -- pH VALUE							**SM4500_H+**
pH	8.1		1.0	S.U.	1	12/06/2016 10:13	R97222
The pH value was measured at the temperature of	20			C	1	12/06/2016 10:13	R97222

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

Eurofins Spectrum Analytical, Inc. -- ESAI-RI

12/08/2016

Client: Ecology and Environment Engineering P.C.
Client Sample ID: INFLUENT
Lab ID: R1104-01

Project: Mr. C's Dry Cleaning
Collection Date: 12/05/2016 15:00

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SM 2340B -- HARDNESS by Calculation							**SM2340_W**
Hardness, Ca/Mg (As CaCO3)	360		4.0	mg/L CaCO3	1	12/07/2016 11:26	85920

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

Eurofins Spectrum Analytical, Inc. -- ESAI-RI

12/08/2016

Client: Ecology and Environment Engineering P.C.
Client Sample ID: EFFLUENT
Lab ID: R1104-02

Project: Mr. C's Dry Cleaning
Collection Date: 12/05/2016 15:00

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SM 2340B -- HARDNESS by Calculation							**SM2340_W**
Hardness, Ca/Mg (As CaCO3)	360		4.0	mg/L CaCO3	1	12/07/2016 11:29	85920

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

Attachment C
Summary of Site Utility Costs and Projections
January to December 2016

Mr. C's Dry Cleaners Site - Remedial Treatment Utility Costs

ATTACHMENT C

NYSDEC Work Assignment #10C3074.0011.07

12 Months of System Operation and Maintenance

November 2016 Report

Utility Budget:

Electric:	$25,300.00
Telephone:	$540.00
Gas	$1,120.00
Total:	$26,960.00

Gas, Telephone, and Electric

Utility Provider	Account #	E&E Cost Center	Description	Jan-2016	Feb-2016	Mar-2016	Apr-2016	May-2016	Jun-2016			
New York State E&G	1001-0310-422	EN-003229-0001-03TTO	Mr. C's Electric Costs	$ 577.59	$ 762.15	$ 265.95	$ 177.66	$ 188.45	$163.34			
New York State E&G	76-311-11-015900-18											
National Fuel Gas	5819628-05	EN-003229-0001-03TTO	Mr. C's Natural Gas Costs	$ 68.33	$ 4.15	$ 58.82	$ 8.76	$ 24.37	$17.22			
			Totals	**$ 645.92**	**$ 766.30**	**$ 324.77**	**$ 186.42**	**$ 212.82**	**$ 180.56**			
				Jul-2016	**Aug-2016**	**Sep-2016**	**Oct-2016**	**Nov-2016**	**Dec-2016**			**Ave. /Month**
			Mr. C's Electric Costs	$ 175.96	$ 194.31	$ 198.23	$ 486.70	$ 1,220.63				**$ 401.00**
			Mr. C's Natural Gas Costs	$21.17	$ 21.09	$ 20.79	$ 46.97					**$ 29.17**
			Totals	**$197.13**	**$ 215.40**	**$ 219.02**	**$ 533.67**	**$ 1,220.63**	**$ -**			**$ 430.16**

Electric - Mr. C's $4,410.97

Natural Gas - Mr. C's $ 291.67

Notes:

Overbilled natural gas costs - no charges

Grand Total - NYSE&G/National Fuel Gas Costs To Date $ 4,702.64

Estimated Reading $ 333.44 in red -adjusted billing

Phone

Utility Provider	Phone #	E&E Cost Center	Location Description	Jan-2016	Feb-2016	Mar-2016	Apr-2016	May-2016	Jun-2016			
Verizon	716-652-0094	EN-003229-0001-03TTO	Mr. C's Telephone Costs	$ 36.01	$ 36.16	$ 36.16	$ 36.16	$ 40.86	$ 36.41			
Account #												
716 652 0094 416 26 2												
				Jul-2016	**Aug-2016**	**Sep-2016**	**Oct-2016**	**Nov-2016**	**Dec-2016**			**Ave./Month**
		EN-003229-0001-03TTO		$ 37.23	$ 38.32							**$ 37.16**

Verizon Costs to Date - Mr. C's $ 297.31

Grand Total All Utilities To Date $ 4,999.95

Mr. C's Dry Cleaners Site - Remedial Treatment Utility Costs

ATTACHMENT C

NYSDEC Work Assignment #11

12 Months of System Operation and Maintenance

November 2016 Report

Budget Remaining:

Electric:	**$20,889.03**	
Telephone:	**$242.69**	
Gas	**$828.33**	
Total:	**$21,960.05**	

	Optimum Operating Hours	Actual Operating Hours	Up-time Percentage	Capacity	Comments:
January-16	672	672	100.00%	9.7%	Very mild winter - very little snow.
February-16	0	0	0.00%	0.0%	System Shutdown
March-16	0	0	0.00%	0.0%	System Shutdown
April-16	0	0	0.00%	0.0%	System Shutdown
May-16	0	0	0.00%	0.0%	System Shutdown
June-16	0	0	0.00%	0.0%	System Shutdown
July-16	0	0	0.00%	0.0%	System Shutdown
August-16	0	0	0.00%	0.0%	System Shutdown
September-16	0	0	0.00%	0.0%	System Shutdown
October-16	600	600	100.00%	9.2%	Clear - warm
November-16	840	840	100.00%	11.4%	Clear- colder
December-16			#DIV/0!		
Totals to Date	**2112**	**2112**	**100.00%**		

* Percent Capacity is based on initial operating groundwater flows from the eight installed pumps from 9/02. Evaluated on total gallons discharged for monthly operating time.

Maximum pump discharges calculated as an average of 78 gpm as the total for all 8 pumps at the site if all pumps operate 100%. With the exception of groundwater pump RW-1, all others run on a batch basis.

Monthly Average Costs

Mr. C's Electric	**$**	**401.00**			
Agway Electric	**$**	**-**			
Mr. C's Gas	**$**	**29.17**			
Mr. C's Telephone	**$**	**37.16**			
Ave. Utility Cost Total	**$**	**467.33**	**times**	**12 Month Estimate**	**$6,075.26**

ecology and environment engineering, p.c.
International Specialists in the Environment
BUFFALO CORPORATE CENTER
368 Pleasant View Drive
Lancaster, New York 14086
Tel: (716) 684-8060, Fax: (716) 684-0844

January 5, 2017

Mr. William Welling, Project Manager
New York State Department of Environmental Conservation
Division of Environmental Remediation
625 Broadway, 12th Floor
Albany, New York 12233 - 7013

Re: Mr. C's Dry Cleaners Site, Contract # D007617, Site # 915157
December 2016 Operations, Maintenance, and Monitoring Report

Dear Mr. Welling:

Ecology and Environment Engineering, P.C. (EEEPC) is pleased to provide the November 2016 Operations, Maintenance, and Monitoring (OM&M) Report for the Mr. C's Dry Cleaners Site, NYSDEC Site # 915157, located in the Village of East Aurora, New York. A summary of field activities prepared by EEEPC's subcontractor, IYER Environmental Group, PLLC (IEG), is provided in Attachment A. The treatment system was re-actived as a result of the recommendations of the Remedial Site Optimization (RSO) plan in October 2016. Selected pages from the individual analytical data package prepared by Spectrum Analytical Inc. (SAI), Warwick, Rhode Island are provided as Attachment B. The site utility information is provided in Attachment C.

Per your request, the Mr. C's treatment system has been shutdown since February 4, 2016. The revised RSO was submitted September 23, 2016. Per our conversations, restart of the treatment system was restarted October 6, 2016. IEG performed review the pumping systems and the treatment operations before startup. As a result of the final RSO document, a proposed pulsing plan was submitted to NYSDEC on October 31, 2016. The proposed pulsing plan was revised and resubmitted after NYSDEC comments on November 23, 2016. The plan was approved by NYSDEC on December 6, 2016. The written plan was developed to optimize the system through a schedule phased and pulsed operations to confirm that asymptotic groundwater conditions have been met in accordance with the DER 10 requirements to support treatment system shutdown. The pulsed-pumping work plan was initialized in the field in December.

Influent/effluent samples were taken on December 5, 2016. Monthly water depth measurements are taken at the site's groundwater monitoring wells, piezometers, and pumping wells during December 2016 by IEG (Attachment A).

Groundwater sampling was performed by EEEPC from April 25-May 2, 2016 to evaluate the potential for rebound of the volatile organic compounds around the Mr. C's site. The 2016 Groundwater Report was issued on June 16, 2016.

In review of the on-site treatment system operations, monitoring and maintenance for December 2016, EEEPC offers the following comments and highlights:

Operational Summary

- The monthly checklists for system inspections from IEG are provided as Attachment A for 12/5/16, 12/19/16, and 1/3/17.
- Based on inspection reports prepared by IEG, the remedial treatment system for the period above had a 100% operational up-time (Table 1) and the treatment of contaminated groundwater during that period totaling of 373,209 gallons (Table 1) for December 2016.
- The compliance samples were taken on December 5, 2016 (Attachment B) and the preliminary analytical results were received from SAI on December 8, 2016. The results indicated effluent discharges are in compliance with the SPDES Equivalency permit requirements. The results are provided in the Table 2.
- The analytical summary results of the December 2016 samples revealed the total volatile organic contaminant concentrations of the influent to be 580 µg/L or 580 ppb. In review of the effluent concentrations the results were 4.10 µg/L or 4.10 ppb. The summary of influent and effluent contaminant concentrations for the December 2016 sampling is presented in Table 1.
- The Mr. C's treatment system based on the total monthly flows removed 1.79 lbs. of targeted contaminants from the groundwater below the site in the month of December 2016 and the cleanup effectiveness was 99.3%. The calculations and data for the month are presented in Table 3.

Mr. C's Site – Remedial Operations and Maintenance Information

- The December 2016 summary of field activities performed between 12/5/2016 and 1/3/17 from IEG are provided as Attachment A.
- Drained the SSDS systems of condensate inside the Treatment building and the Country Cottage (586 Main Street, Suite 4). Condensate placed into the treatment system.
- Replaced the leading REDUX valve and line.

Subslab Depressurization Systems (SSDS).

- Property owner at 27 Whaley Ave. (David Dubois) has not returned EEEPC's calls for inspection of the SSDS unit. EEEPC will continue to contact to obtain access for inspection.
- Drained the condensate from the SSDS units from the Country Cottage (586 Main Street – unit 4) and in Treatment Room unit.
- SSDS installation design at 31 Paine Street is currently in process.
- Discussion of new SSDS unit installation at 23 Paine Street is in progress. EEEPC needs to re-issue letter of determination of SSDS from NYSDOH to the new property owner. The new property owner of 23 Paine Street house as of November 2015 is David Dubois.

Status of RSO and Pulsed Pumping Work Plan.

- Additional review of the recommendations in the summary report to be evaluated with the Remedial Site Optimization (RSO) program.
- The Final RSO was issued to NYSDEC on September 23, 2016.
- Revised Pulsing Plan issued on November 23, 2016 and approved on December 6, 2016.
- The startup of the pulsed-pumping work plan was initiated in December 2016. After the January sample is taken in early January, the system will be shut down for four weeks then restarted and sampled. Phased sampling will be performed according to Table 3-1 in the approved work plan.

Soil Vapor Intrusion Investigation Program (2017)

- Discuss new property locations with NYSDEC / NYSDOH for SVII work in 2017.

Site Management Plan

- EEEPC submitted the updated/revised SMP to NYSDEC and NYSDEC Region 9 on March 2, 2015.
- This is an active site document, so future revisions will be performed once major changes to the management of the site are required after optimization evaluation is performed.

Annual Long-term Groundwater Monitoring Well Report

- Review with the NYSDEC PM if another groundwater sampling / analytical for fall 2016 was necessary. This was discussed and will not be necessary to perform at this time.

Periodic Review Report (PRR)

- 2016 PRR being prepared for submittal in January 2017. 2016 Forms received from NYSDEC on November 18, 2016.

If you have questions regarding the December 2016 OM&M report summary, please do not hesitate to contact me at 716-684-8060.

Very Truly Yours,
Ecology and Environment Engineering, P. C.

Michael G. Steffan
Project Manager

cc: D. Szymanski, Region 9, NYSDEC - Buffalo w/ attachments
D. Iyer, IEG – w/attachments
CTF - 10C3074.0011.07

Table 1
Mr. C's Dry Cleaners Site Remediation
Site #915157
System Operation and Management

Month	Up-time		Treated Effluent (gallon)	VOC Removal		
	Reporting Hours	Operational Up-time		Influent VOCs (µg/L)	Effluent VOCs(µg/L)	VOCs Removed (lbs.)
(Up-time from 9/5/02 to 01/04/16)	**111,949.50**	**95.23%**	**128,814,819**	**NA**	**NA**	**1,614.16**
January 4, 2016 - February 1, 2016	672	100.00%	305,578	692.0	0.0	1.76
February 1, 2016 - February 29, 2016	0	0.00%	0	0.0	0.0	0.00
March 1, 2016 - March 31, 2016	0	0.00%	0	0.0	0.0	0.00
April 1, 2016 - April 30, 2016	0	0.00%	0	0.0	0.0	0.00
April 31, 2016 - June 1, 2016	0	0.00%	0	0.0	0.0	0.00
June 1, 2016 - June 27, 2016	0	0.00%	0	0.0	0.0	0.00
June 27, 2016 - July 31, 2016	0	0.00%	0	0.0	0.0	0.00
July 31, 2016 - September 3, 2016	0	0.00%	0	0.0	0.0	0.00
September 3, 2016 - September 27, 2016	0	0.00%	0	0.0	0.0	0.00
October 6, 2016 - October 31, 2016	600	100.00%	259,917	498.0	12.2	1.05
October 31, 2016 - December 5, 2016	840	100.00%	447,513	580.0	4.1	2.15
December 5, 2016 - January 3, 2017	696	100.00%	373,209	580.0	4.1	1.79
Total in 2016	**2,808.00**	**1.00**	**1,386,217**	**2,350.00**	**20.40**	**6.75**
Total from startup	**114,757.50**	**0.95**	**130,201,036.00**	**NA**	**NA**	**1,620.92**

NOTES:

1. Up-time based as percentage of total reporting hours.
2. Treatment system operated by the Tyree Organization Ltd. from 9/02 - 9/03.
3. Treatment system operated by O&M Enterprises Inc. from 10/03 - 7/07.
4. Treatment system operated by Iyer Environmental Group from 7/07 to present.
5. VOC removal calculations are based on monthly water samples and assumes samples are representative of the entire reporting period.
6. VOC removal calculations assume that non-detect values = 0 ug/L.
7. Total VOCs summations include estimated "J" values.
8. VOC removal calculations are based on effluent totalizer readings.
9. "Influent VOCs" and "Effluent VOCs" values given above is the summation of values for individual compounds given in monthly analytical reports.
10. Unit conversion: 1 pound = 453.5924 grams, 1 gallon = 3.785 liters
11. Formula for the VOC removal calculation:

$(VOCs_{Influent} - VOCs_{Effluent})(ug/L) \cdot (1g/10^6 ug) \cdot (1\ lb/453.5924\ g) \cdot (Monthly\ process\ water)(gal) \cdot (3.785\ L/gallon)$

12. Using the 2/2/16 analytical results.

Table 2
Mr. C's Dry Cleaners Site Remediation
Site #915157
Effluent Discharge Criteria & Analytical Compliance Results

Parameter/Analyte	Daily Maximum[1]	Units	December - Effluent Analytical Values - Compliance
Flow (Average)	N/A	gpd	12,869
pH	6.0 - 9.0	standard units	8.10
1,1 Dichloroethene	10	µg/L	ND
1,1 Dichloroethane	10	µg/L	ND
cis-1,2-dichloroethene	10	µg/L	2.20
Trichloroethene	10	µg/L	ND
Tetrachloroethene	10	µg/L	1.90
Vinyl Chloride	10	µg/L	ND
Benzene	5	µg/L	ND
Ethylbenzene	5	µg/L	ND
Methylene Chloride	10	µg/L	ND
1,1,1 Trichloroethane	10	µg/L	ND
Toluene	5	µg/L	ND
Methyl-t-Butyl Ether (MTBE)	NA	ug/L	ND
o-Xylene[2]	5	µg/L	ND
m, p-Xylene[2]	10	µg/L	ND
Total Xylenes	NA	ug/L	ND
Iron, total[9]	600	µg/L	
Aluminum[9]	4,000	µg/L	
Copper[9]	48	µg/L	
Lead[9]	11	µg/L	
Manganese[9]	2,000	µg/L	
Silver[9]	100	µg/L	
Vanadium[9]	28	µg/L	
Zinc[9]	230	µg/L	
Total Dissolved Solids[9]	850	mg/L	
Total Suspended Solids[9]	20	mg/L	
Hardness	N/A	mg/L	360
Cyanide, Free[9]	10	µg/L	

NOTES:

1. "Daily Maximum" excerpted from Attachment E of Addendum 1 to the Construction Contract Documents dated October 2000.
2. Analytical report did not differentiate between o-Xylene and m, p-Xylene. Total Xylene value reported is given in each line.
3. Shaded cells indicate that analytical value exceeds the "Daily Maximum."
4. "ND" indicates that the compound was not detected and lists the practical quantitation limit in parentheses.
5. "NA" indicates that analyses were not performed and data is unavailable.
6. Average flows based on effluent readings: **October 31 - December 5, 2016 - 12,869 gallons per day.**
7. "J" indicates an estimated value below the detection limit.
8. "B" indicates analyte found in the associated blank.
9. Removed from the required analysis list by NYSDEC Region 9 in February 2005.
10. "NS" indicates that the parameter analysis was not sampled.

40 **Indicates non-compliance with the NYSDEC effluent discharge requirements**
NR **Indicates Not Reported by Lab**

Table 3
Mr. C's Dry Cleaners Site Remediation
NYSDEC Site #915157
December 2016 VOC Analytical Summary

Compound	Based on the December Effluent Analytical Results				
	Influent Concentration* (ug/L)		Effluent Concentration** (ug/L)		Cleanup Efficiency*** (%)
Acetone	ND (<20)	U	ND (<5.0)	U	NA
Benzene	ND (<4.0)	U	ND (<1.0)	U	NA
2-Butanone	ND (<20)	U	ND (<5.0)	U	NA
cis-1, 2-Dichloroethene	210		2.2		99.00%
Chloroform	ND (<4.0)	U	ND (<1.0)	U	NA
Chloromethane	ND (<4.0)	U	ND (<1.0)	U	NA
Methylene chloride	ND (<4.0)	U	ND (<1.0)	U	NA
Methyl tert-butyl ether (MTBE)	ND (<4.0)	U	ND (<1.0)	U	NA
Methyl acetate	ND (<4.0)	U	ND (<1.0)	U	NA
Tetrachloroethene (PCE)	310		1.9		99.40%
Toluene	ND (<4.0)	U	ND (<1.0)	U	NA
Trichloroethene (TCE)	46.0		ND (<1.0)	U	100.00%
Carbon Disulfide	ND (<4.0)	U	ND (<1.0)	U	NA
1,1,2 Trichloro-1,2,2-trifluororethane	ND (<4.0)	U	ND (<1.0)	U	NA
2-Hexanone	ND (<20)	U	ND (<5.0)	U	NA
4-Methyl-2-pentanone	ND (<20)	U	ND (<5.0)	U	NA
Cyclohexane	ND (<4.0)	U	ND (<1.0)	U	NA
trans-1,2-dichloroethene	ND (<4.0)	U	ND (<1.0)	U	NA
Chlorobenzene	ND (<4.0)	U	ND (<1.0)	U	NA
Methylcyclohexane	ND (<4.0)	U	ND (<1.0)	U	NA
Ethylbenzene	ND (<4.0)	U	ND (<1.0)	U	NA
Methyl acetate	ND (<4.0)	U	ND (<1.0)	U	NA
Vinyl Chloride	14		ND (<1.0)	U	100.00%
Total Xylenes	ND (<4.0)	U	ND (<1.0)	U	NA
• The 1st progress monitoring sampling of the groundwater wells associated with the "pilot" bioaugmentation program was performed on July 1-2, 2013.	**580.0**		**4.10**		**99.30%**

Notes:
1. "NA" = Not applicable
2. "U" = Compound analyzed, but was not detected. Detection limit in parentheses.
3. "DJ" or "J" indicates an estimated value below the practical quantitation limit but above the method detection limit.
4. Non-detect values are assumed to be equal to zero for calculation of monthly average concentrations.
5. "D" indicates the compound concentration was obtained form a secondary dilution analysis.
6. Acetone was not detected in the influent sample above the MDL but detected in the effluent sample. It is not a contaminant of concern for the Mr. C's site.

* Detection Limits (<10) and (<50)
** Detection Limits (<1) and (<5)
*** Contaminants of Concern only

Attachment A
IEG Summary of Field Activities
December 2016

12/5/16

12/19/16

1/3/17

MR. C's DRY CLEANERS SITE
NYSDEC Site #9-15-157
OM&M: SITE INSPECTION FORM

DATE: 5-Dec-16 ACTIVITIES: Site Inspection

INSPECTION PERSONNEL: R. Allen OTHER PERSONNEL: E & E, Inc

WEATHER CONDITIONS: Cloudy, cool OUTSIDE TEMPERATURE (°F): 40

ARE WELL PUMPS OPERATING IN AUTO: YES: ____ NO: √ If "NO", provide explanation below

PW-7 is OFF due to maintenance problem

PROVIDE WATER LEVEL READINGS ON CONTROL PANEL

RW-1	ON: √	OFF:	5 ft	PW-5	ON:	OFF: √	5 ft		
PW-2	ON:	OFF: √	3 ft	PW-6	ON:	OFF: √	5 ft		
PW-3	ON:	OFF: √	6 ft	PW-7	ON: √	OFF:	13 ft		
PW-4	ON: √	OFF:	3 ft	PW-8	ON:	OFF: √	7 ft		

EQUALIZATION TANK: 3 ft Last Alarm D/T/Condition: 12/5/16 PW-2 Overload

NOTES:

INFLUENT FLOW RATE: 10 gpm INFLUENT TOTALIZER READING 12,791,614 gallons

SEQUESTERING AGENT DRUM LEVEL: 4 inches (x 1.7=) AMOUNT OF AGENT REMAINING: 7 gallons

SEQUESTERING AGENT FEED RATE: ____ ml/min METERING PUMP PRESSURE: 4.0 psi

BAG FILTER PRESSURES:		Top	Bottom			Top	Bottom	
	LEFT:	0	0	psi	RIGHT:	7	0	psi

INFLUENT FEED PUMP IN USE: #1 √ #2 ____ INFLUENT PUMP PRESSURE: 7 psi

AIR STRIPPER BLOWER IN USE: #1 √ #2 ____ AIR STRIPPER PRESSURE: 41.0 in. H_2O

AIR STRIPPER DIFFERENTIAL PRESSURE: Broken in. H_2O DISCHARGE PRESSURE: 0.30 in. H_2O

AIR FLOW: 900 fpm X 1.4 = 1260 CFM

EFFLUENT PUMP IN USE: #1 ____ #2 √ EFFLUENT FEED PUMP PRESSURE: 10 psi

EFFLUENT FLOW RATE: 140 gpm EFFLUENT TOTALIZER READING: 81,503,586 | 126720 gallons

ARE BUILDING HEATERS IN USE? YES: √ NO: ____ INSIDE TEMPERATURE (°F): 67

IS SUMP PUMP IN USE: YES: √ NO: ____ ARE ANY LEAKS PRESENT? YES: √ NO: ____

WATER LEVEL IN SUMP: 7.5 in. TREATMENT BUILDING CLEAN & ORGANIZED? YES: √ NO: ____

MR. C's DRY CLEANERS SITE
NYSDEC Site #90150157
SITE INSPECTION FORM

5-Dec-16

SAMPLES COLLECTED? YES: √ NO: _____

	Sample ID	Time of Sampling	pH	Turbidity	Temp.	Sp. Cond.
AIR STRIPPER INFLUENT:	INF	2:30 PM	7.50	4.74	13.3	1903
AIR STRIPPER EFFLUENT:	EFF	2:30 PM	8.52	3.22	13.9	1979

IS THERE EVIDENCE OF TAMPERING/VANDALISM OF WELLS: ?	YES: _____	NO: √
WERE MANHOLES INSPECTED?	YES: √	NO: _____
WERE ELECTRICAL BOXES INSPECTED?	YES: √	NO: _____
IS WATER PRESENT IN ANY MANHOLES OR ELECTRICAL BOXES?	YES: _____	NO: √

If yes, provide manhole/electric box ID and description of any corrective measures below:

PZ-4D inner ring is corroded and collapsing.

SUBSLAB SYSTEM

MANOMETER: 1.5 **in. WC** **(Fan Inlet)**

	west	east
FLOW (fpm):		
FLOW (cfm):		
VACUUM GAUGE (in WC)		

NOTES: cfm = 0.05 x fpm (3" PVC)

INCLUDE REMARKS & DESCRIBE ANY OTHER SYSTEM MAINTENANCE PERFORMED ON MR. C's SITE

Remarks: One Air Stripper float fitting has slow drip leak.

Effluent Pipe has (2) slow drip leaks near EQ Tank.

Other Actions: Treatment Room SVE System - drained condensate

586 Building SVE System - drained condensate

AGWAY

Remarks: Site is empty of materials and has been graded and graveled.

Other Actions:

MR. C's DRY CLEANERS SITE
NYSDEC Site #9-15-157
OM&M: SITE INSPECTION FORM

DATE: 19-Dec-16 ACTIVITIES: Site Inspection

INSPECTION PERSONNEL: R. Allen OTHER PERSONNEL: ----

WEATHER CONDITIONS: Partly cloudy, cold OUTSIDE TEMPERATURE (° F): 20

ARE WELL PUMPS OPERATING IN AUTO: YES: ____ NO: √ If "NO", provide explanation below

PW-7 is OFF due to maintenance problem

PROVIDE WATER LEVEL READINGS ON CONTROL PANEL

RW-1	ON: ____	OFF: √	6 ft	PW-5	ON: ____	OFF: √	4 ft		
PW-2	ON: ____	OFF: √	7 ft	PW-6	ON: ____	OFF: √	6 ft		
PW-3	ON: ____	OFF: √	6 ft	PW-7	ON: √	OFF: ____	13 ft		
PW-4	ON: ____	OFF: √	7 ft	PW-8	ON: ____	OFF: √	5 ft		

EQUALIZATION TANK: 3 ft Last Alarm D/T/Condition: 12/19/16 PW-2 Overload

NOTES: ____

INFLUENT FLOW RATE: 0 gpm INFLUENT TOTALIZER READING 13,023,028 gallons

SEQUESTERING AGENT DRUM LEVEL: 32 inches (x 1.7=) AMOUNT OF AGENT REMAINING: 55 gallons

SEQUESTERING AGENT FEED RATE: ____ ml/min METERING PUMP PRESSURE: ____ psi

BAG FILTER PRESSURES:		Top	Bottom			Top	Bottom	
	LEFT:	0	0	psi	RIGHT:	7	0	psi

INFLUENT FEED PUMP IN USE: #1 √ #2 ____ INFLUENT PUMP PRESSURE: 7 psi

AIR STRIPPER BLOWER IN USE: #1 √ #2 ____ AIR STRIPPER PRESSURE: 47.0 in. H_2O

AIR STRIPPER DIFFERENTIAL PRESSURE: broken in. H_2O DISCHARGE PRESSURE: <0 in. H_2O

AIR FLOW : 750 fpm X 1.4 = 1050 CFM

EFFLUENT PUMP IN USE: #1 ____ #2 √ EFFLUENT FEED PUMP PRESSURE: 10 psi

EFFLUENT FLOW RATE: 140 gpm EFFLUENT TOTALIZER READING: 81,676,618 | 300960 gallons

ARE BUILDING HEATERS IN USE? YES: √ NO: ____ INSIDE TEMPERATURE (° F): 68

IS SUMP PUMP IN USE: YES: √ NO: ____ ARE ANY LEAKS PRESENT? YES: √ NO: ____

WATER LEVEL IN SUMP: 6.5 in. TREATMENT BUILDING CLEAN & ORGANIZED? YES: √ NO: ____

MR. C's DRY CLEANERS SITE
NYSDEC Site #90150157
SITE INSPECTION FORM

19-Dec-16

SAMPLES COLLECTED? YES: _____ NO: √

	Sample ID	Time of Sampling	pH	Turbidity	Temp.	Sp. Cond.
AIR STRIPPER INFLUENT:						
AIR STRIPPER EFFLUENT:						

IS THERE EVIDENCE OF TAMPERING/VANDALISM OF WELLS: ? YES: _____ NO: √

WERE MANHOLES INSPECTED? YES: √ NO: _____

WERE ELECTRICAL BOXES INSPECTED? YES: √ NO: _____

IS WATER PRESENT IN ANY MANHOLES OR ELECTRICAL BOXES? YES: _____ NO: √

If yes, provide manhole/electric box ID and description of any corrective measures below:

PZ-4D inner ring is corroded and collapsing. Many of the MWs and UEs are covered with snow.

SUBSLAB SYSTEM

MANOMETER: 1.4 **in. WC** (Fan Inlet)

	west	east
FLOW (fpm):		
FLOW (cfm):		
VACUUM GAUGE (in WC)		

NOTES: cfm = 0.05 x fpm (3" PVC)

INCLUDE REMARKS & DESCRIBE ANY OTHER SYSTEM MAINTENANCE PERFORMED ON MR. C's SITE

Remarks: One Air Stripper float fitting has slow drip leak.

Effluent Pipe has (2) slow drip leaks near EQ Tank.

Other Actions: Treatment Room SVE System - drained condensate

586 Building SVE System - drained condensate

Replace leaking Redux valve and line. Clean and refit leaking Jesco Pump fittings.

AGWAY

Remarks: Site is empty of materials and has been graded and graveled.

Other Actions:

MR. C's DRY CLEANERS SITE
NYSDEC Site #9-15-157
OM&M: SITE INSPECTION FORM

DATE: 3-Jan-17 ACTIVITIES: Site Inspection

INSPECTION PERSONNEL: R. Allen OTHER PERSONNEL:

WEATHER CONDITIONS: Cloudy, rain, cool OUTSIDE TEMPERATURE (° F): 43

ARE WELL PUMPS OPERATING IN AUTO: YES: NO: √ If "NO", provide explanation below

PW-7 is OFF due to maintenance problem

PROVIDE WATER LEVEL READINGS ON CONTROL PANEL

RW-1	ON:		OFF: √	4 ft	PW-5	ON:		OFF: √	5 ft
PW-2	ON:		OFF: √	6 ft	PW-6	ON:		OFF: √	6 ft
PW-3	ON:		OFF: √	2 ft	PW-7	ON: √		OFF:	14 ft
PW-4	ON:		OFF: √	7 ft	PW-8	ON:		OFF: √	5 ft

EQUALIZATION TANK: 3 ft Last Alarm D/T/Condition: 1/3/2017 PW-2 Overload

NOTES:

INFLUENT FLOW RATE: 0 gpm INFLUENT TOTALIZER READING 13,271,972 gallons

SEQUESTERING AGENT DRUM LEVEL: 12 inches (x 1.7=) AMOUNT OF AGENT REMAINING: 20.5 gallons

SEQUESTERING AGENT FEED RATE: ml/min METERING PUMP PRESSURE: psi

BAG FILTER PRESSURES:	Top	Bottom		Top	Bottom	
LEFT:	2	0	psi	RIGHT: 12 - 8	0	psi

INFLUENT FEED PUMP IN USE: #1 √ #2 INFLUENT PUMP PRESSURE: 7 psi

AIR STRIPPER BLOWER IN USE: #1 √ #2 AIR STRIPPER PRESSURE: 46.0 in. H_2O

AIR STRIPPER DIFFERENTIAL PRESSURE: broken in. H_2O DISCHARGE PRESSURE: 1.50 in. H_2O

AIR FLOW : 550 fpm X 1.4 = 770 CFM

EFFLUENT PUMP IN USE: #1 #2 √ EFFLUENT FEED PUMP PRESSURE: 10 psi

EFFLUENT FLOW RATE: 149 gpm EFFLUENT TOTALIZER READING: 81,876,795 501860 gallons

ARE BUILDING HEATERS IN USE? YES: √ NO: INSIDE TEMPERATURE (° F): 82

IS SUMP PUMP IN USE: YES: √ NO: ARE ANY LEAKS PRESENT? YES: √ NO:

WATER LEVEL IN SUMP: 6.0 in. TREATMENT BUILDING CLEAN & ORGANIZED? YES: √ NO:

MR. C's DRY CLEANERS SITE
NYSDEC Site #90150157
SITE INSPECTION FORM

3-Jan-17

SAMPLES COLLECTED? YES: _____ NO: √

	Sample ID	Time of Sampling	pH	Turbidity	Temp.	Sp. Cond.
AIR STRIPPER INFLUENT:						
AIR STRIPPER EFFLUENT:						

IS THERE EVIDENCE OF TAMPERING/VANDALISM OF WELLS: ? YES: _____ NO: √

WERE MANHOLES INSPECTED? YES: √ NO: _____

WERE ELECTRICAL BOXES INSPECTED? YES: √ NO: _____

IS WATER PRESENT IN ANY MANHOLES OR ELECTRICAL BOXES? YES: √ NO: _____

If yes, provide manhole/electric box ID and description of any corrective measures below:

PZ-4D inner ring is corroded and collapsing.

SUBSLAB SYSTEM

MANOMETER: 1.5 **in. WC** (Fan Inlet)

	west	east
FLOW (fpm):		
FLOW (cfm):		
VACUUM GAUGE (in WC)		

NOTES: cfm = 0.05 x fpm (3" PVC)

INCLUDE REMARKS & DESCRIBE ANY OTHER SYSTEM MAINTENANCE PERFORMED ON MR. C's SITE

Remarks: One Air Stripper float fitting has slow drip leak.

Effluent Pipe has a slow drip leak near EQ Tank.

Other Actions: Treatment Room SVE System - little condensate

586 Building SVE System - drained condensate

AGWAY

Remarks: Site is empty of materials and has been graded and graveled.

Other Actions:

MR. C's DRY CLEANERS SITE
NYSDEC Site #9-15-157
OM&M: PIEZOMETER WATER LEVEL LOG

Date: 24-Dec-16 **Measurements taken by:** R. Allen

RW-1	18.20 ft	Comments:	
PZ-1A	11.69 ft	Comments:	
PZ-1B	11.45 ft	Comments:	
PZ-1C	12.43 ft	Comments:	
PZ-1D	12.72 ft	Comments:	
PW-2	16.40 ft	Comments:	
PZ-2A	11.18 ft	Comments:	
PZ-2B	11.52 ft	Comments:	
PZ-2C	11.03 ft	Comments:	
MW-7	11.52 ft	Comments:	Substitute for 2D
PW-3	16.60 ft	Comments:	
PZ-3A	11.70 ft	Comments:	
PZ-3B	11.78 ft	Comments:	
PZ-3C	12.28 ft	Comments:	
PZ-3D	---- ft	Comments:	Under snow pile
PW-4	20.70 ft	Comments:	
PZ-4A	11.94 ft	Comments:	
PZ-4B	11.04 ft	Comments:	
PZ-4C	----- ft	Comments:	sealed over
PZ-4D	10.55 ft	Comments:	

PW-5	15.80 ft	Comments:	
PZ-5A	10.97 ft	Comments:	
PZ-5B	11.01 ft	Comments:	
PZ-5C	10.63 ft	Comments:	
PZ-5D	11.42 ft	Comments:	
PW-6	18.50 ft	Comments:	
PZ-6A	11.85 ft	Comments:	
PZ-6B	11.70 ft	Comments:	
PZ-6C	11.88 ft	Comments:	
PZ-6D	11.72 ft	Comments:	Shown as RW-2 on map
PW-7	11.20 ft	Comments:	
MPI-6S	11.52 ft	Comments:	
PZ-7B	11.51 ft	Comments:	
OW-B	11.44 ft	Comments:	
PZ-7D	----- ft	Comments:	Product in Well
PW-8	21.80 ft	Comments:	
PZ-8A	8.47 ft	Comments:	
PZ-8B	8.40 ft	Comments:	
PZ-8C	8.31 ft	Comments:	
PZ-8D	8.19 ft	Comments:	

PUMPS IN OPERATION DURING MEASUREMENTS

RW-1 pump on?		Yes	√	No	PW-5 pump on?	Yes	√	No
PW-2 pump on?		Yes	√	No	PW-6 pump on?	Yes	√	No
PW-3 pump on?		Yes	√	No	PW-7 pump on?	Yes	√	No
PW-4 pump on?		Yes	√	No	PW-8 pump on?	Yes	√	No

Mr. C's CLEANERS OM&M

SUMMARY OF FIELD ACTIVITIES BY IEG - 12/2016

DATE	ACTIVITY
5-Dec	OM&M Weekly Inspection. End of Month Summaries. Get Supplies.
7-Dec	PW-7 - well repair. Notify IAE of broken trim / light over door. Get supplies.
8-Dec	Repair storage well pump. Clean vent screen over man door. Mixed (3) Redux drums. PW-7 - well repair. Instal vent insullation and cover.
12-Dec	OM&M Weekly Inspection. Inspect and drain SVE Systems as needed.
14-Dec	Inspect and drain SVE systems as needed. Change bag filters.
15-Dec	PW-7 - well repair. Design system to alleviate Redux siphoning.
16-Dec	Install Redux system solenoid. Get supplies.
19-Dec	OM&M Weekly Inspection. Inspect and drain SVE Systems as needed. Get supplies. Replace Redux line and valve.
20-Dec	Check system. OM&M office work.
23-Dec	Clear snow / ice off of piezometers.
24-Dec	Piezometer Readings.
28-Dec	OM&M Weekly Inspection. Inspect and drain SVE Systems as needed.
31-Dec	Check system. Inspect and drain SVE Systems as needed.

Mr. C's CLEANERS OM&M
STATUS OF FIELD ACTIVITIES BY IEG - 12/2016

ACTIVITY	DESCRIPTION	COMPLETION DATE/STATUS
Instal Liquid Containment Trench	Southeast section of Treatment Room experienced several water leaks in the past. A shallow trench should be cut into floor slab to direct slow leaks into sump box.	Oct-16
Air Stripper Leaks	Air Stripper leaked at several places when system was restarted. The unit is corroded in many areas. Find and seal leaks in corroded metal with epoxy. Seal leaks around rubber gaskets with caulk.	Oct-16
PW-4 Transducer does not read accurately	PanelView level for this well is not accurate. Inspect well to find and repair the problem with the transducer and / or wiring.	Oct-16
Repair PZ-4B	Inner ring of piezometer was severely damaged by Town's snowplow truck. Talked to Town - they will address problem in Spring. Inner ring must be replaced.	Oct-16
PW-2, PW-3 and PW-4 inspections	These well pumps were due for an inspection and cleaning. Pull well pumps up and clean transducers and pumps. Purge vertical pipes as needed.	Oct-16
PW-5 and PW-7 inspections	These well pumps were due for an inspection and cleaning. Pull well pumps up and clean transducers and pumps. Purge vertical pipes as needed.	Nov-16
Redux usage rapidly increased	The rate of Redux usage increased rapidly during the past several months despite turning the Jesco Pump settings to their lowest levels. Clean pump and test. Adjust clamps on Redux line. Add solenoid to Redux line.	Dec-16
PW-4 UE Level	Asphalt around Underground Enclosure has sunk, leaving it vulnerable to damage. Bring parking lot up to level with asphalt patch.	in progress
Rebuild JAC Pump as needed	Jesco America Corp recommends rebuilding the Redux pump when needed. Purchased rebuild kit.	in progress
Inspect and clean Manholes	Inspect manholes near operating pumps. Pump out water in manholes and clean out remaining sediment and other material.	in progress
Cool Treatment Room	Temperature in Treatment Room is well above 90 degrees during the summer months. Need to increase outside air inflow to the room.	in progress
Filter Housings are corroded	Flanges that seal filter baskets inside Rosedale Filter Housings are corroded. Sediment flows around filters instead of being trapped. Replace seals in existing housings and patch as needed (short term). Replace housings (long term).	in progress
Replace Air Stripper Latches	Around (6) latches on the Air Stripper trays are loose or broken. Reattach keepers with JB Weld. Replace broken latches and springs with new parts.	in progress
Repair Leaking Ball Valve	Influent ball valve east of EQ Tank drips. Inspect/clean & replace if necessary.	in progress
Reduce Influent Pump Rate	Lab Tests have shown high levels of VOCs. Try lengthening the time that the Influent Pump runs to increase the Air Sparging time inside the Air Stripper	in progress
Add Air Sparging System	Lab Tests have shown high levels of VOCs. Try adding an Air Sparging system to the sump box of the Air Stripper to increase the treatment of the effluent.	in progress
South Wall should be sealed	South Wall of Treatment Room has leaked into the neighboring unit several times when there have been water related problems. Trim wall insullation matting to reduce moisture retension. Seal base of wall with silicone caulking.	in progress
SVE Fan pipe collects water	The SVE Fan pipe on Building 586 collects water. There is a plug just below the fan to drain water out of the horizontal section of the pipe. Inspect system and make corrections to prevent the pipe from filling with water.	in progress
EE-4 Paved Over	During the Aug 2016 paving of the north half of the parking lot, Piezometer EE-4 was covered. Locate piezometer and remove asphalt to expose it.	in progress
Product in PZ-7D	During Winter 2016 Piezometer Readings product was found in PZ-7D. Remove product to prevent spread.	in progress
PZ-4D Inner Ring is corroded through	The inner ring of this piezometer is corroded through causing the box to slowly collapse. Replace the road box of this piezometer.	in progress
PanelView False Alarm Record	The PanelView constantly records PW-2 OVERLOAD. The well pump runs fine and the Alarm Light on the Main Control Panel does not come on. Reset PanelView to correct for this constant record.	in progress
PW-6 and PW-8 inspections	These well pumps are due for an inspection and cleaning. Pull well pumps up and clean transducers and pumps. Purge vertical pipes as needed.	in progress
PW-7 does not operate	Troubleshoot and make repairs as needed.	in progress

Mr. C's CLEANERS OM&M

SUMMARY OF WATER PUMP MAINTENANCE BY IEG - 2016

as of Dec 2016

ID	CLEAN & INSPECT PUMP	REPLACED PUMP	REPAIR PUMP	PITLESS ADAPTER	INNER RING	HORIZONTAL PIPE	CHECK VALVE	CLEAN & INSPECT TRANSDUCER	REPLACE TRANSDUCER	PUMP OUT WELL	PIEZOMETERS	REPLACE ANEROID BELLOWS	CLEAN OUT & INSPECT ELECTRICAL BOX	ELECTRICAL BOX REPAIR
RW - 1	Jan 08, May 10, Jan 12, Oct 15	Feb 08, Jan 12	May 10, Nov 08					May 10, Jan 12, Oct 15			PZ-1B repaired Sep 16			
PW - 2	Jun 08, Aug 09, May 10, Apr 13, Sep 15, Oct 16	Jul 08, Apr 13 Dec 15				Sep-15		Nov 11, May 10, Apr 13 Dec 15, Oct 16	Sep 09, Dec 11	Aug-09			Nov-11	Sep-09
PW - 3	Jun 08, Aug 09, May 10, Sep 15, Oct 16	Jul 08, Dec 11, Oct 15		Repair adapter		Sep-15		Aug 09, Nov 11, Oct 15, Oct 16	Dec 11, Sep 15	Aug-09			Nov 11, Sep 15	
PW - 4	Dec 07, May 08, Sep 09, May 10, Jan 12, Oct 15, Oct 16	Dec 07, Jan 12	Sep-13		Aug 13	Oct-16		May 10, Nov 11, Oct 15, Oct 16	Dec 11, Mar 08, Sep 08	Jul 09, Sep 09	PZ-4B replaced Sep 16	Oct 16	Sep 09, Nov 11, Oct 16	Sep-09
PW - 5	Jan 12, May 08, Oct 15, Nov 16	Jul 08, Jan 12				Nov-16		Mar 11, Oct 15, Nov 16	Jan 12, Sep 08				Jan-12	
PW - 6	Jun 08, Jul 09, Jul 12, Nov 12, Aug 15	Jun 08, Jul 09, Aug 12, Nov 12, Sep 15		Replaced Aug 15		Jul 12, Nov 12, Sep 15	Aug 15	Aug 09, Jul 12, Dec 12, Apr 13, Aug 15	Sep 09, Sep 15	Aug-09	PZ-6A, PZ-6C repaired Sep 16	Aug 15	Aug 09, Sep 09, Sep 15	Jul 09, Sep 09
PW - 7	Jun 08, Jul 09, May 10, Oct 10, Aug 11, Mar 12, Jul 12, Nov 12, Aug 15, Nov 11	Nov 07, Jul 09, Oct 10, Nov 12		Replaced Aug 15		Jul 12, Nov 12, Nov 16	Aug 15	Oct 10, Aug 11, Mar 12, Jul 12, Dec 12, Aug 15, Nov 16		Aug 09, May 10, Aug 11				
PW - 8	Jun 08, Aug 09, May 10, Aug 11, Jul 12, Dec 12, Aug 15	Jul 08, Sep 09, Aug 11, Dec 12		Replaced Aug 15		Pipe 8/09, Jul 12, Sep 15	Aug 15	May 10, Aug 11, Jul 12, Dec 12, Apr 13, Aug 15		Aug 09, May 10, Aug 11		Aug 15	Apr 13, Aug 15	Apr-13

Mr. C's CLEANERS OM&M

SUMMARY OF WATER PUMP STATUS - 2016

as of Dec 2016

ID	NEEDS CLEANING & INSPECTION	NEEDS NEW PUMP	NEEDS NEW INNER RING	NEEDS P.A. OR PIPE	NEEDS WELL CLEAN-OUT	PITLESS ADAPTER	NEEDS HORIZONTAL LINE PURGE	NEEDS CHECK VALVE INSPECTION	NEEDS TRANSDUCER INSPECTION	NEEDS NEW TRANSDUCER	PIEZOMETERS	NEEDS ANEROID BELLOWS	NEEDS U.E. CLEANED	NEEDS U.E. REPAIR
RW-1	YES	NO	PZ-1B		YES				NO	NO		NO	NO	YES - bolts
PW-2	NO	NO	NO		NO				NO	NO		NO	NO	YES - bolts
PW-3	NO	NO	NO						NO	NO		NO	NO	NO
PW-4	NO	NO	NO				NO		NO	NO	PZ-4D corroded	NO	NO	YES - Asphalt patch
PW-5	NO	NO	NO		N)		NO		NO	NO			NO	NO
PW-6	YES	NO	NO				NO		NO	NO		NO	NO	DONE
PW-7	YES		NO		NO		NO		NO				NO	NO
PW-8	YES	NO	NO		NO		NO		NO	NO		NO	NO	NO

Attachment B
Analytical Report from
Spectrum Analytical Laboratories

Analytical Data Package Work Order ID: R1104
Sampled by IEG: December 5, 2016

Eurofins Spectrum Analytical, Inc. -- ESAI-RI

12/08/2016

Client: Ecology and Environment Engineering P.C.
Client Sample ID: INFLUENT
Lab ID: R1104-01

Project: Mr. C's Dry Cleaning
Collection Date: 12/05/2016 15:00

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SW846 8260C -- VOC by GC-MS							**SW8260_W**
Dichlorodifluoromethane	ND		4.0	ug/L	4	12/07/2016 21:30	85927
Chloromethane	ND		4.0	ug/L	4	12/07/2016 21:30	85927
Vinyl chloride	14		4.0	ug/L	4	12/07/2016 21:30	85927
Bromomethane	ND		4.0	ug/L	4	12/07/2016 21:30	85927
Chloroethane	ND		4.0	ug/L	4	12/07/2016 21:30	85927
Trichlorofluoromethane	ND		4.0	ug/L	4	12/07/2016 21:30	85927
1,1-Dichloroethene	ND		4.0	ug/L	4	12/07/2016 21:30	85927
Acetone	ND		20	ug/L	4	12/07/2016 21:30	85927
Carbon disulfide	ND		4.0	ug/L	4	12/07/2016 21:30	85927
Methylene chloride	ND		4.0	ug/L	4	12/07/2016 21:30	85927
trans-1,2-Dichloroethene	ND		4.0	ug/L	4	12/07/2016 21:30	85927
Methyl tert-butyl ether	ND		4.0	ug/L	4	12/07/2016 21:30	85927
1,1-Dichloroethane	ND		4.0	ug/L	4	12/07/2016 21:30	85927
2-Butanone	ND		20	ug/L	4	12/07/2016 21:30	85927
cis-1,2-Dichloroethene	210		4.0	ug/L	4	12/07/2016 21:30	85927
Chloroform	ND		4.0	ug/L	4	12/07/2016 21:30	85927
1,1,1-Trichloroethane	ND		4.0	ug/L	4	12/07/2016 21:30	85927
Carbon tetrachloride	ND		4.0	ug/L	4	12/07/2016 21:30	85927
1,2-Dichloroethane	ND		4.0	ug/L	4	12/07/2016 21:30	85927
Benzene	ND		4.0	ug/L	4	12/07/2016 21:30	85927
Trichloroethene	46		4.0	ug/L	4	12/07/2016 21:30	85927
1,2-Dichloropropane	ND		4.0	ug/L	4	12/07/2016 21:30	85927
Bromodichloromethane	ND		4.0	ug/L	4	12/07/2016 21:30	85927
cis-1,3-Dichloropropene	ND		4.0	ug/L	4	12/07/2016 21:30	85927
4-Methyl-2-pentanone	ND		20	ug/L	4	12/07/2016 21:30	85927
Toluene	ND		4.0	ug/L	4	12/07/2016 21:30	85927
trans-1,3-Dichloropropene	ND		4.0	ug/L	4	12/07/2016 21:30	85927
1,1,2-Trichloroethane	ND		4.0	ug/L	4	12/07/2016 21:30	85927
Tetrachloroethene	310		4.0	ug/L	4	12/07/2016 21:30	85927
2-Hexanone	ND		20	ug/L	4	12/07/2016 21:30	85927
Dibromochloromethane	ND		4.0	ug/L	4	12/07/2016 21:30	85927
1,2-Dibromoethane	ND		4.0	ug/L	4	12/07/2016 21:30	85927
Chlorobenzene	ND		4.0	ug/L	4	12/07/2016 21:30	85927
Ethylbenzene	ND		4.0	ug/L	4	12/07/2016 21:30	85927
Xylene (Total)	ND		4.0	ug/L	4	12/07/2016 21:30	85927
Styrene	ND		4.0	ug/L	4	12/07/2016 21:30	85927
Bromoform	ND		4.0	ug/L	4	12/07/2016 21:30	85927
Isopropylbenzene	ND		4.0	ug/L	4	12/07/2016 21:30	85927

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

Eurofins Spectrum Analytical, Inc. -- ESAI-RI

12/08/2016

Client: Ecology and Environment Engineering P.C.
Client Sample ID: INFLUENT
Lab ID: R1104-01

Project: Mr. C's Dry Cleaning
Collection Date: 12/05/2016 15:00

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SW846 8260C -- VOC by GC-MS							**SW8260_W**
1,1,2,2-Tetrachloroethane	ND		4.0	ug/L	4	12/07/2016 21:30	85927
1,3-Dichlorobenzene	ND		4.0	ug/L	4	12/07/2016 21:30	85927
1,4-Dichlorobenzene	ND		4.0	ug/L	4	12/07/2016 21:30	85927
1,2-Dichlorobenzene	ND		4.0	ug/L	4	12/07/2016 21:30	85927
1,2-Dibromo-3-chloropropane	ND		4.0	ug/L	4	12/07/2016 21:30	85927
1,2,4-Trichlorobenzene	ND		4.0	ug/L	4	12/07/2016 21:30	85927
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.0	ug/L	4	12/07/2016 21:30	85927
Cyclohexane	ND		4.0	ug/L	4	12/07/2016 21:30	85927
Methyl acetate	ND		4.0	ug/L	4	12/07/2016 21:30	85927
Methylcyclohexane	ND		4.0	ug/L	4	12/07/2016 21:30	85927
Surrogate: Dibromofluoromethane	103		85-115	%REC	4	12/07/2016 21:30	85927
Surrogate: 1,2-Dichloroethane-d4	103		70-120	%REC	4	12/07/2016 21:30	85927
Surrogate: Toluene-d8	96.9		85-120	%REC	4	12/07/2016 21:30	85927
Surrogate: Bromofluorobenzene	94.0		75-120	%REC	4	12/07/2016 21:30	85927

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

Eurofins Spectrum Analytical, Inc. -- ESAI-RI

12/08/2016

Client: Ecology and Environment Engineering P.C.
Client Sample ID: EFFLUENT
Lab ID: R1104-02

Project: Mr. C's Dry Cleaning
Collection Date: 12/05/2016 15:00

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SW846 8260C -- VOC by GC-MS							**SW8260_W**
Dichlorodifluoromethane	ND		1.0	ug/L	1	12/07/2016 19:26	85927
Chloromethane	ND		1.0	ug/L	1	12/07/2016 19:26	85927
Vinyl chloride	ND		1.0	ug/L	1	12/07/2016 19:26	85927
Bromomethane	ND		1.0	ug/L	1	12/07/2016 19:26	85927
Chloroethane	ND		1.0	ug/L	1	12/07/2016 19:26	85927
Trichlorofluoromethane	ND		1.0	ug/L	1	12/07/2016 19:26	85927
1,1-Dichloroethene	ND		1.0	ug/L	1	12/07/2016 19:26	85927
Acetone	ND		5.0	ug/L	1	12/07/2016 19:26	85927
Carbon disulfide	ND		1.0	ug/L	1	12/07/2016 19:26	85927
Methylene chloride	ND		1.0	ug/L	1	12/07/2016 19:26	85927
trans-1,2-Dichloroethene	ND		1.0	ug/L	1	12/07/2016 19:26	85927
Methyl tert-butyl ether	ND		1.0	ug/L	1	12/07/2016 19:26	85927
1,1-Dichloroethane	ND		1.0	ug/L	1	12/07/2016 19:26	85927
2-Butanone	ND		5.0	ug/L	1	12/07/2016 19:26	85927
cis-1,2-Dichloroethene	2.2		1.0	ug/L	1	12/07/2016 19:26	85927
Chloroform	ND		1.0	ug/L	1	12/07/2016 19:26	85927
1,1,1-Trichloroethane	ND		1.0	ug/L	1	12/07/2016 19:26	85927
Carbon tetrachloride	ND		1.0	ug/L	1	12/07/2016 19:26	85927
1,2-Dichloroethane	ND		1.0	ug/L	1	12/07/2016 19:26	85927
Benzene	ND		1.0	ug/L	1	12/07/2016 19:26	85927
Trichloroethene	ND		1.0	ug/L	1	12/07/2016 19:26	85927
1,2-Dichloropropane	ND		1.0	ug/L	1	12/07/2016 19:26	85927
Bromodichloromethane	ND		1.0	ug/L	1	12/07/2016 19:26	85927
cis-1,3-Dichloropropene	ND		1.0	ug/L	1	12/07/2016 19:26	85927
4-Methyl-2-pentanone	ND		5.0	ug/L	1	12/07/2016 19:26	85927
Toluene	ND		1.0	ug/L	1	12/07/2016 19:26	85927
trans-1,3-Dichloropropene	ND		1.0	ug/L	1	12/07/2016 19:26	85927
1,1,2-Trichloroethane	ND		1.0	ug/L	1	12/07/2016 19:26	85927
Tetrachloroethene	1.9		1.0	ug/L	1	12/07/2016 19:26	85927
2-Hexanone	ND		5.0	ug/L	1	12/07/2016 19:26	85927
Dibromochloromethane	ND		1.0	ug/L	1	12/07/2016 19:26	85927
1,2-Dibromoethane	ND		1.0	ug/L	1	12/07/2016 19:26	85927
Chlorobenzene	ND		1.0	ug/L	1	12/07/2016 19:26	85927
Ethylbenzene	ND		1.0	ug/L	1	12/07/2016 19:26	85927
Xylene (Total)	ND		1.0	ug/L	1	12/07/2016 19:26	85927
Styrene	ND		1.0	ug/L	1	12/07/2016 19:26	85927
Bromoform	ND		1.0	ug/L	1	12/07/2016 19:26	85927
Isopropylbenzene	ND		1.0	ug/L	1	12/07/2016 19:26	85927

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

Eurofins Spectrum Analytical, Inc. -- ESAI-RI

12/08/2016

Client: Ecology and Environment Engineering P.C.
Client Sample ID: EFFLUENT
Lab ID: R1104-02

Project: Mr. C's Dry Cleaning
Collection Date: 12/05/2016 15:00

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SW846 8260C -- VOC by GC-MS							**SW8260_W**
1,1,2,2-Tetrachloroethane	ND		1.0	ug/L	1	12/07/2016 19:26	85927
1,3-Dichlorobenzene	ND		1.0	ug/L	1	12/07/2016 19:26	85927
1,4-Dichlorobenzene	ND		1.0	ug/L	1	12/07/2016 19:26	85927
1,2-Dichlorobenzene	ND		1.0	ug/L	1	12/07/2016 19:26	85927
1,2-Dibromo-3-chloropropane	ND		1.0	ug/L	1	12/07/2016 19:26	85927
1,2,4-Trichlorobenzene	ND		1.0	ug/L	1	12/07/2016 19:26	85927
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	ug/L	1	12/07/2016 19:26	85927
Cyclohexane	ND		1.0	ug/L	1	12/07/2016 19:26	85927
Methyl acetate	ND		1.0	ug/L	1	12/07/2016 19:26	85927
Methylcyclohexane	ND		1.0	ug/L	1	12/07/2016 19:26	85927
Surrogate: Dibromofluoromethane	98.9		85-115	%REC	1	12/07/2016 19:26	85927
Surrogate: 1,2-Dichloroethane-d4	97.6		70-120	%REC	1	12/07/2016 19:26	85927
Surrogate: Toluene-d8	101		85-120	%REC	1	12/07/2016 19:26	85927
Surrogate: Bromofluorobenzene	97.4		75-120	%REC	1	12/07/2016 19:26	85927

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

Eurofins Spectrum Analytical, Inc. -- ESAI-RI

12/08/2016

Client: Ecology and Environment Engineering P.C.
Client Sample ID: INFLUENT
Lab ID: R1104-01

Project: Mr. C's Dry Cleaning
Collection Date: 12/05/2016 15:00

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SM 4500 H+ B -- pH VALUE							**SM4500_H+**
pH	7.9		1.0	S.U.	1	12/06/2016 10:10	R97222
The pH value was measured at the temperature of	20			C	1	12/06/2016 10:10	R97222

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

Eurofins Spectrum Analytical, Inc. -- ESAI-RI

12/08/2016

Client: Ecology and Environment Engineering P.C.
Client Sample ID: EFFLUENT
Lab ID: R1104-02

Project: Mr. C's Dry Cleaning
Collection Date: 12/05/2016 15:00

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SM 4500 H+ B -- pH VALUE							**SM4500_H+**
pH	8.1		1.0	S.U.	1	12/06/2016 10:13	R97222
The pH value was measured at the temperature of	20			C	1	12/06/2016 10:13	R97222

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

Eurofins Spectrum Analytical, Inc. -- ESAI-RI

12/08/2016

Client: Ecology and Environment Engineering P.C.
Client Sample ID: INFLUENT
Lab ID: R1104-01

Project: Mr. C's Dry Cleaning
Collection Date: 12/05/2016 15:00

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SM 2340B -- HARDNESS by Calculation							**SM2340_W**
Hardness, Ca/Mg (As CaCO3)	360		4.0	mg/L CaCO3	1	12/07/2016 11:26	85920

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

Eurofins Spectrum Analytical, Inc. -- ESAI-RI

12/08/2016

Client: Ecology and Environment Engineering P.C.
Client Sample ID: EFFLUENT
Lab ID: R1104-02

Project: Mr. C's Dry Cleaning
Collection Date: 12/05/2016 15:00

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SM 2340B -- HARDNESS by Calculation							**SM2340_W**
Hardness, Ca/Mg (As CaCO3)	360		4.0	mg/L CaCO3	1	12/07/2016 11:29	85920

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

Attachment C
Summary of Site Utility Costs and Projections
January to December 2016

Mr. C's Dry Cleaners Site - Remedial Treatment Utility Costs

ATTACHMENT C

NYSDEC Work Assignment #10C3074.0011.07

12 Months of System Operation and Maintenance

December 2016 Report

Utility Budget:

Electric:	$25,300.00
Telephone:	$540.00
Gas	$1,120.00
Total:	$26,960.00

Gas, Telephone, and Electric

Utility Provider	Account #	E&E Cost Center	Description	Jan-2016	Feb-2016	Mar-2016	Apr-2016	May-2016	Jun-2016
New York State E&G	1001-0310-422	EN-003229-0001-03TTO	Mr. C's Electric Costs	$ 577.59	$ 762.15	$ 265.95	$ 177.66	$ 188.45	$163.34
New York State E&G	76-311-11-015900-18								
National Fuel Gas	5819628-05	EN-003229-0001-03TTO	Mr. C's Natural Gas Costs	$ 68.33	$ 4.15	$ 58.82	$ 8.76	$ 24.37	$17.22
			Totals	**$ 645.92**	**$ 766.30**	**$ 324.77**	**$ 186.42**	**$ 212.82**	**$ 180.56**

	Jul-2016	Aug-2016	Sep-2016	Oct-2016	Nov-2016	Dec-2016	Ave. /Month
Mr. C's Electric Costs	$ 175.96	$ 194.31	$ 198.23	$ 486.70	$ 1,220.63	$ 1,115.54	**$ 460.54**
Mr. C's Natural Gas Costs	$21.17	$ 21.09	$ 20.79	$ 46.97	$ 25.86	$ 77.15	**$ 32.89**
Totals	**$197.13**	**$ 215.40**	**$ 219.02**	**$ 533.67**	**$ 1,246.49**	**$ 1,192.69**	**$ 493.43**

Electric - Mr. C's $5,526.51

Natural Gas - Mr. C's $ 394.68

Notes:

Overbilled natural gas costs - no charges

Grand Total - NYSE&G/National Fuel Gas Costs To Date $ 5,921.19

Estimated Reading $ 333.44 in red -adjusted billing

Phone

Utility Provider	Phone #	E&E Cost Center	Location Description	Jan-2016	Feb-2016	Mar-2016	Apr-2016	May-2016	Jun-2016
Verizon	716-652-0094	EN-003229-0001-03TTO	Mr. C's Telephone Costs	$ 36.01	$ 36.16	$ 36.16	$ 36.16	$ 40.86	$ 36.41
Account #									
716 652 0094 416 26 2									

	Jul-2016	Aug-2016	Sep-2016	Oct-2016	Nov-2016	Dec-2016	Ave./Month
EN-003229-0001-03TTO	$ 37.23	$ 38.32	$ 38.02	$ 37.98	$ 37.75	$ 37.90	**$ 37.41**

Verizon Costs to Date - Mr. C's $ 448.96

Grand Total All Utilities To Date $ 6,370.15

Mr. C's Dry Cleaners Site - Remedial Treatment Utility Costs

NYSDEC Work Assignment #11

12 Months of System Operation and Maintenance

December 2016 Report

ATTACHMENT C

Budget Remaining:

Electric:	**$19,773.49**
Telephone:	**$91.04**
Gas	**$725.32**
Total:	**$20,589.85**

	Optimum Operating Hours	Actual Operating Hours	Up-time Percentage	Capacity	Comments:
January-16	672	672	100.00%	9.7%	Very mild winter - very little snow.
February-16	0	0	0.00%	0.0%	System Shutdown
March-16	0	0	0.00%	0.0%	System Shutdown
April-16	0	0	0.00%	0.0%	System Shutdown
May-16	0	0	0.00%	0.0%	System Shutdown
June-16	0	0	0.00%	0.0%	System Shutdown
July-16	0	0	0.00%	0.0%	System Shutdown
August-16	0	0	0.00%	0.0%	System Shutdown
September-16	0	0	0.00%	0.0%	System Shutdown
October-16	600	600	100.00%	9.2%	Clear - warm
November-16	840	840	100.00%	11.4%	Clear- colder
December-16	696	696	100.00%	11.5%	Cold and light snow
Totals to Date	**2808**	**2808**	**100.00%**		

* Percent Capacity is based on initial operating groundwater flows from the eight installed pumps from 9/02. Evaluated on total gallons discharged for monthly operating time.

Maximum pump discharges calculated as an average of 78 gpm as the total for all 8 pumps at the site if all pumps operate 100%. With the exception of groundwater pump RW-1, all others run on a batch basis.

Monthly Average Costs

Mr. C's Electric	**$**	**460.54**			
Agway Electric	**$**	**-**			
Mr. C's Gas	**$**	**32.89**			
Mr. C's Telephone	**$**	**37.41**			
Ave. Utility Cost Total	**$**	**530.85**	**times**	**12 Month Estimate**	**$6,901.00**