

#### ecology and environment engineering, p.c.

#### **BUFFALO CORPORATE CENTER**

368 Pleasant View Drive, Lancaster, New York 14086 Tel: 716/684-8060, Fax: 716/684-0844

February 9, 2010

Mr. William Welling PE, 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 # D004442.DC13, Site # 9-15-157 January 2010 Operations, Maintenance, and Monitoring Report

Dear Mr. Welling:

Ecology and Environment Engineering, P.C. (EEEPC) is pleased to provide the January 2010 Operations, Maintenance, and Monitoring (OM&M) Report for the Mr. C's Dry Cleaners Site, NYSDEC Site # 9-15-157, located in East Aurora, New York. Copies of weekly inspection reports prepared by EEEPC's subcontractor, Iyer Environmental Group, PLLC (IEG) are provided in <a href="Attachment A">Attachment A</a>. Selected pages from the individual analytical data package prepared by Mitkem Laboratories, Inc. (MTK) on January 14, 2009 are provided as <a href="Attachment B">Attachment B</a>. The full analytical report along with QA/QC information will be retained by EEEPC. Remedial treatment system utility costs for the Mr. C's and Agway sites are provided as <a href="Attachment C">Attachment C</a>.

In review of the on-site treatment system operations, monitoring and maintenance for January 2010, EEEPC offers the following comments and highlights:

#### **Operational Summary**

#### Mr. C's Site - Remedial Operations Information

- Checklists for weekly system inspections from IEG are provided as <u>Attachment A</u> for 1/5, 1/12, 1/18, 1/25, and 2/1/10.
- Based on the weekly inspection results performed by IEG, the remedial treatment system had a 100% operational up-time (<u>Table 1</u>) for January 2010 and the treatment of contaminated groundwater totaling of 648,852 gallons (<u>Table 2</u>).
- The analytical samples for the monthly compliance were taken on January 5, 2010. The sampling results were received by EEEPC on January 14, 2010. Excerpts from the Analytical Data package for the January 5, 2010 sampling event are presented in <u>Attachment B</u>.
- The air stripper unit on Mr. C's property is in compliance and MTK continues to provide analytical data to sub-ppb accuracy, supporting the accurate determination of effluent contaminant levels. The summary of Effluent Discharge Criteria & Analytical Compliance Results for January 2010 is presented in <u>Table 3</u>.

#### Mr. William Welling PE, Project Manager February 9, 2010 Page 2 of 2

- A review of the analytical data revealed the influent concentration to be 1420 ug/L or 1420 ppb, and 0.00 ug/L or 0.00 ppb of treated effluent. The summary of influent and effluent contaminant concentrations for January 2010 is presented in Table 4. Overall cleanup efficiency for the reporting period 1/5/10 to 2/1/10 was 100.00%.
- The Mr. C's treatment system based on the total monthly flows has effectively removed 7.69 lbs of targeted contaminants from the groundwater below the site in the month of January 2010. The calculations and data for the month and entire year of 2010 are presented in Table 5.

The air stripper unit on Mr. C's property continues to be in compliance and provide analytical data to sub-ppb accuracy, supporting the accurate determination of effluent contaminant levels. Based on analytical results for the January 5, 2010 sampling event, the Mr. C's treatment system continues to effectively remove targeted contaminants from the groundwater below the site in accordance with the SPDES Equivalency permit.

#### **Agway Site Remedial Information**

• Road reconstruction of Main Street has been completed in front of the Agway property. Equipment and construction materials have been removed from the site.

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

• No current operational issues.

#### Mr. C's and Agway Energy Usage Information

A copy of the site utility costs from the Mr. C's and Agway remedial operations for January 2010 and year to date are provided as Attachment C.

If you have questions regarding the January 2010 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- 002700.DC13.02.01.01

Michael J. Stiffan

#### Table 1 Mr. C's Dry Cleaners Site Remediation Site #9-15-157

#### **System Operational Time**

Month	Reporting Hours	Operational Up- time
(Up-time from inception to 1/5/10)	61,992.50	95.99%
January 5, 2010 - February 1, 2010	648	100.00%
Feb-2010		
Mar-2010		
Apr-2010		
May-2010		
Jun-2010		
Jul-2010		
Aug-2010		
Sep-2010		
Oct-2010		
Nov-2010		
Dec-2010		
Total Hours from System Startup '2/02'	62,640.50	·
Average Operational Up-ti	me from startup =	96.03%

Average Operational Up-time from startup = 96.03%

Average Operational Up-time for 2010 = 100.00%

#### 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

Table 2
Mr. C's Dry Cleaners Site Remediation Monthly Process Water Volumes Site #9-15-157

Month	Actual Period	Gallons
Total - Inception to December 2009	9/5/02 - 1/5/10	109,009,157
January 2010 <sup>3</sup>	1/5/10 - 2/1/10	648,852
February 2010 <sup>3</sup>		
March 2010 <sup>3</sup>		
April 2010³		
May 2010 <sup>3</sup>		
$fune 2010^3$		
$July  2010^3$		
August 2010 <sup>3</sup>		
September 2010 <sup>3</sup>		
October 2010 <sup>3</sup>		
November 2010 <sup>3</sup>		
December 2010 <sup>3</sup>		
Total (	Total Gallons Treated in 2010	648,852
Total Gallo	Total Gallons Treated To Date:	109,658,009

#### NOTES:

- 1. System operated by Tyree Organization Ltd. From 9/02 9/03
  - 2. System operated by O&M Enterprises from 10/03 7/07 3. System operated by IEG PLLC from 7/07 present

Mr. C's Dry Cleaners Site Remediation Site #9-15-157 Table 3

## Effluent Discharge Criteria & Analytical Compliance Results

			January 5, 2010 Effluent Analytical Values
Parameter/Analyte	Daily Maximum <sup>1</sup>	Units	Соприянсе
Flow		gpd	24,031.56
PH	6.0 - 9.0	standard units	7.90
1,1 Dichloroethene	10	μg/L	ND(<5.0)
1,2 Dichloroethane	10	µg/L	ND(<5.0)
cis-1,2-dichloroethene	10	μg/L	ND (<5.0)
Trichloroethene	10	μg/L	, ND (<5.0)
Tetrachloroethene	[	μg/L	ND (<5.0)
Vinyl Chloride	10	μg/L	ND(<5.0)
Benzene	5	µg/L	ND (<5.0)
Ethylbenzene	5	µg/L	ND(<5.0)
Methylene Chloride	10	ng/L	ND (<5.0)
1,1,1 Trichloroethane	10	T/Brl	ND(<5.0)
Toluene	5	T/Brl	ND (<5.0)
Methyl-t-Butyl Ether (MTBE)	NA	ug/L	ND (<5.0)
o-Xylene³		μg/L	NA
m, p-Xylene <sup>3</sup>	10	μg/L	NA
Total Xylenes	NA	ng/L	ND (<5.0)
Iron, total	009	Т/git	NA <sup>9</sup>
Aluminum	4,000	ng/L	$NA^9$
Copper	48	T/Bfl	NA <sup>9</sup>
Lead	11	l μg/L	$NA^9$
Manganese	2,000	ug/L	NA <sup>9</sup>
Silver	100	дg/1	NA <sup>9</sup>
Vanadium		T/and	NA <sup>9</sup>
Zinc	230	T/8th	NA <sup>9</sup>
Total Dissolved Solids	850	mgL	NA <sup>9</sup>
Total Suspended Solids	20		$NA^9$
Hardness	N/A	mg/l	540
Cyanide, Free	10	µg/L	NA <sup>9</sup>

- 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 taken January 5, 2010 through February 1, 2010. Total gallons: 648,852 divided by 27 operating days (648 actual operating hours).
  - 7. "J" indicates an estimated value below the detection limit.
- "B" indicates analyte found in the associated blank.
   Removed from the required analysis list by NYSDEC Region 9 in February 2005.

Table 4

## Mr. C's Dry Cleaners Site Remediation NYSDEC Site #9-15-157 January 2010 VOC Analytical Summary

		Based on th	Based on the 1/05/10 Effluent Sampling Results	ent Sampling	Results
Compound	Influent Concentration*	entration*	Effluent Concentration*	centration*	Cleanup Efficiency
	(ng/L)	(-	(ug/L)	L)	(%)
Acetone	ND (<50:0)	U	ND (<5:0)	Ω	NA
Benzene	ND (<50.0)	U	ND (<5:0)	$\Omega$	NA
2-Butanone	ND (<50:0)	Ω	ND (<5.0)	U	NA
cis-1, 2-Dichloroethene	29.0	J	ND (<5.0)	Ω	100%
Methylene chloride	11.0	J	ND (<5.0)	Ω.	100%
Methyl tert-butyl ether (MTBE)	11.0	J	ND (<5.0)	U.	100%
Tetrachloroethene	1300.0		ND (<5.0)	U	100%
Toluene	ND (<50.0)	Ω	ND (<5.0)	n	NA
Trichloroethene	0.69		ND (<5.0)	U	100%
Carbon Disulfide	ND (<50.0)	Ω	ND (<5.0)	U	NA
1,1,2 Trichloro-1,2,2-trifluororethane	ND (<50.0)	Ω	ND (<5.0)	U	NA
Cyclohexane	(0:05>) QN	n	ND (<5.0)	n	NA
trans-1,2-dichloroethene	(o:05>) QN	Ω	ND (<5.0)	n n	NA
Methylcyclohexane	(0.05>) CIN	Ω	ND (<5.0)	Ω	NA
Methyl acetate	(0:05>) GN	n	ND (<5.0)	Ω	NA
Total Xylenes	ND (<50:0)	Ω	ND (<5.0)	n .	NA
January, 5, 2010 TOTALs (in ug/L) =	1420.0		0.00		100.00%

#### Notes:

- 1. "NA" = Not applicable
- 2. "ND" or "U" = Compound analyzed, but was not detected. Detection limit in parentheses
- 3. "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" = Compounds identified in analysis required secondary dilution factoring.
    - 6. "B" indicates analyte found in the associated blank.

#### Table 5

#### Mr. C's Dry Cleaners Site Remediation Site #9-15-157

#### Monthly VOCs Removed From Groundwater

Month	Actual Period	Influent VOCs	Effluent VOCs	VOCs Removed
	•	(μg/L)	(μg/L)	(lbs.)
Total pounds	of VOCs removed from	n inception to Dece	mber 2009 =	1435.30
January 2010	1/5/2010 - 2/1/2010	1420	0.00	7.69
February 2010				
March 2010				
April 2010				
May 2010				1
June 2010				
July 2010				
August 2010				
September 2010				
October 2010				
November 2010				
December 2010				
Total pounds	of VOCs removed fro	m inception to Ja	nuary 2010 =	1,442.99
- Та	otal pounds of VOCs	removed in 2010	=	7.69

#### HISTORICAL NOTES:

- 1. Calculations are based on monthly water samples and assumes samples are representative of the entire reporting period.
- 2. Calculations assume that non-detect values = 0 ug/L.
- 3. Total VOCs summations include estimated "J" values.
- 4. Calculations are based on effluent totalizer readings.
- 5. "Influent VOCs" and "Effluent VOCs" values given above is the summation of values for individual compounds given in monthly analytical reports.
- 6. No samples were collected in September 2003. August 2003 values are used.
- 7. Treatment system operated by Tyree Organization, Ltd. from 9/02 to 9/03.
- 8. Treatment system operated by O&M Enterprises from 10/03 to 7/07.
- 9. Treatment system operated by IEG from 7/07 to present.

#### CONVERSIONS:

1 pound = 453.5924 grams

1 gallon = 3.785 liters

#### Based on the Analytical Results from Each Month:

Pounds of VOCs removed calculated by the following formula:

(VOCs Influent - VOCs Effluent)(ug/L) · (1g/10 dug) · (1 lb/453.5924 g) · (Monthly process water)(gal) · (3.785 L/gallon)

## Attachment A IEG Weekly Inspection Reports January 2010

#### Including:

1/5/10

1/12/10

1/18/10

1/25/10

2/1/10

#### NYSDEC Site #9-15-157

#### OM&M: SITE INSPECTION FORM

DATE: 5-Jan-10	ACTIVITIES:	Site Inspection		
INSPECTION PERSONNEL; R. Alien		OTHER PERSONNEL:		
WEATHER CONDITIONS: Cloudy, cold			OUTSIDE TEMPERATURE	(°F): <u>20</u>
ARE WELL PUMPS OPERATING IN AUTO:	YES:	NO:	If "NO", provide explanation b	elow
PRO	VIDE WATER LEV	EL READINGS ON CONTROL PAI	NEL	
RW-1 ON: OFF: V	<u>5</u> ft	PW-5 ON:√	OFF: 4_	ft
PW-2 ON: OFF: \(  \)	ft	PW-6 ON:	OFF:	ft
PW-3 ON: OFF:	, 6ft	PW-7 ON:	OFF:	ft
PW-4 ON: OFF:	<u>6</u> ft	PW-8 ON:	OFF:6	ft
EQUALIZATION TANK:	_4ft	Last Alarm D/T/Condition	n: 10/29/09 Air Stripper High Leve	<u> </u>
NOTES:				·
INFLUENT FLOW RATE: 18	8gpm	INFLUENT TOTALIZER READING	G: 4,340,704.0	gallons
SEQUESTERING AGENT DRUM LEVEL:	28 inches	(x 1.7=) AMOUNT O	F AGENT REMAINING: 47.	6 gallons
SEQUESTERING AGENT FEED RATE:	6.0 ml/min	• •	NG PUMP PRESSURE: 3.0	) psi
- <del> </del>	Тор	Bottom	Top Botto	
BAG FILTER PRESSURES:	LEFT: 0	0 psi RIGHT:	6.5 0	psi
INFLUENT FEED PUMP IN USE: #1	#2	2 V INFLUENT PUMP	PRESSURE: 14	psi
AIR STRIPPER BLOWER IN USE: #1	<del></del>	2 √ AIR STRIPPER	PRESSURE: 36.0	in. H₂O
AIR STRIPPER DIFFERENTIAL PRESSURE:	0.026		PRESSURE: 0.1	in. H₂O
	#2	EFFLUENT FEED PUMP	PRESSURE: 7.5	 5 psi
LI / LOCKY / GM/ M GOL	#2	<del>-</del>		32380 gallons
EFFLUENT FLOW RATE: 89 gpm	EFFLUEN1	TOTALIZER READING:		
ARE BUILDING HEATERS IN USE? YES:			INSIDE TEMPERATURE	(°F):60
IS SUMP PUMP IN USE: YES: √	NO:	ARE ANY LEAKS PRESENT	77 YES:	NO:
WATER LEVEL IN SUMP: 6.0 in.	TREATMENT	BUILDING CLEAN & ORGANIZED	0? YES:	NO:

#### NYSDEC Site #90150157

#### SITE INSPECTION FORM

SAMPLES COLLECTED? YES:	√ NO:						
	Sample ID	Time of Sampling		рН	Turbidity	Temp.	Sp. Cond.
AIR STRIPPER INFLUENT:	INF	2:00 PM	_	7.28	6,84	11.3	2627
AIR STRIPPER EFFLUENT:	<u>EFF</u>	2:00 PM		8,56	6.44	11.7	2508
IS THERE EVIDENCE OF TAMP	PERING/VANDALIS	SM OF WELLS: ?	YES:_		NO:	<b>√</b>	
	WERE MANHOL	ES INSPECTED?	YES:	٧	NO:		
WERE E	ELECTRICAL BOX	ES INSPECTED?	YES:_	<u>√</u>	NO:		
IS WATER PRESENT IN ANY MAN	HOLES OR ELEC	TRICAL BOXES?	YES:_	√	NO:_		
		ox ID and description of					
Z-4C is damaged from snowplow. Recomm	nend filling with grav	vel and cement. MWs_a	ınd UEs ar	e covered	with ice and	I snow.	<u></u>
		<del></del>					
							<del></del>
INCLUDE REMARKS	& DESCRIBE AN	OTHER SYSTEM MA	INTENANO	CE PERFO	ORMED ON	MR, C's Si	E
emarks: Emptied (5) gals from Ai	ir Stripper exhaus:	t pipe drip bucket.					
emarks: Emptied (5) gals from Ai	ottipper exitude	: pipo cirip bassion					
ther Actions:			-				
ther Actions:			-				
ther Actions:							
ther Actions:							
ther Actions:							
ther Actions:		AGWAY					
system vacuum:	-23in.	AGWAY H <sub>2</sub> O		AIR PF	RESSURE:		20psi
SYSTEM VACUUM:	-23 in. 4.0 psi	H₂O	0.0	AIR PF	RESSURE:		<b>20</b> psi
<i>SYSTEM VACUUM:</i>		H₂O SP-5	0.0		RESSURE:	28.0	<del></del> '
SYSTEM VACUUM:           SP-1:         8.1         scfm           SP-2:         0.0         scfm	4.0 psi	H <sub>2</sub> O SP-5 SP-6		scfm	RESSURE:	28.0	osi osi
SYSTEM VACUUM:         SP-1:       8.1       scfm         SP-2:       0.0       scfm         SP-3:       0.0       scfm	4.0 psi 9.5 psi	H₂O SP-5 SP-6 SP-7	0.0	scfm scfm	RESSURE:	28.0	osi osi
SYSTEM VACUUM:         SP-1:       8.1       scfm         SP-2:       0.0       scfm         SP-3:       0.0       scfm         SP-4:       0.0       scfm	4.0 psi 9.5 psi 9.0 psi 9.5 psi	H₂O SP-5 SP-6 SP-7	0.0	scfm scfm scfm scfm	- - - -	28.0 > 30 > 30 > 30	osi osi osi osi
SP-1:       8.1       scfm         SP-2:       0.0       scfm         SP-3:       0.0       scfm         SP-4:       0.0       scfm    INCLUDE REMARKS	4.0 psi 9.5 psi 9.0 psi 9.5 psi 8. DESCRIBE ANY	SP-5 SP-6 SP-7 SP-8	0.0	scfm scfm scfm scfm	- - - -	28.0 > 30 > 30 > 30	osi osi osi osi
SYSTEM VACUUM:         SP-1:       8.1       scfm         SP-2:       0.0       scfm         SP-3:       0.0       scfm         SP-4:       0.0       scfm	4.0 psi 9.5 psi 9.0 psi 9.5 psi 8. DESCRIBE ANY	SP-5 SP-6 SP-7 SP-8	0.0	scfm scfm scfm scfm	- - - -	28.0 > 30 > 30 > 30	osi osi osi osi
SYSTEM VACUUM:           SP-1:         8.1         scfm           SP-2:         0.0         scfm           SP-3:         0.0         scfm           SP-4:         0.0         scfm   INCLUDE REMARKS	4.0 psi 9.5 psi 9.0 psi 9.5 psi 8. DESCRIBE ANY	SP-5 SP-6 SP-7 SP-8	0.0	scfm scfm scfm scfm	- - - -	28.0 > 30 > 30 > 30	osi osi osi osi

#### NYSDEC Site #9-15-157

#### OM&M: SITE INSPECTION FORM

DATE:	12-Jan-10		ACTIVITIES:	Site Inspectio	n		
INSPECT	ION PERSONNEL:	R. Allen		OTHER PERSO	NNEL:		
WEATHE	R CONDITIONS: Col	d, cloudy				OUTSIDE TEMPE	RATURE (° F):
ARE WE	LL PUMPS OPERATING	IN AUTO:	YES:	NO:	· 	If "NO", provide exp	lanation below
•							
		PROVI	DE WATER LEV	EL READINGS O	N CONTROL PAN	1	
RW-1	ON:	off:	8 ft	PW-5	ON:	. OFF:	6ft
PW-2	ON:	off: <u>√</u>	6ft	PW-6	ON:	OFF:	ft
PW-3	ON:	off: <u>√</u>	<u>4</u> ft	PW-7	on:	OFF:	ft
PW-4	on:	OFF:	5ft	PW-8	ON:	OFF:√_	ft
	EQUALIZ	ATION TANK:	4 ft	Last Al	arm D/T/Condition:	10/29/09 Air Stripper	High Level
	NOTES:						
INFLU	ENT FLOW RATE:	27	gpm	INFLUENT TOTA	ALIZER READING	4,606,1	48.0 gallons ———————
` \$E	QUESTERING AGENT L	ORUM LEVEL:	18_inches	(x 1.7=	) AMOUNT OF	AGENT REMAINING:	30.6 gallons
s	EQUESTERING AGENT	FEED RATE: 6	5.0 _ml/min		METERINO	3 PUMP PRESSURE:	psi
<b>-</b>			Top	Bottom		Тор	Bottom
	BAG FILTER PRESSU	RES: L	EFT: 0	0 psi	RIGHT:	12	0 psi
INFLU	ENT FEED PUMP IN US	======================================	#2		FLUENT PUMP PI	RESSURE:	19psi
ΔIR:	STRIPPER BLOWER IN	USE: #1	#2	2 1	AIR STRIPPER PI	RESSURE:	37.0 In. H <sub>2</sub> O
	IPPER DIFFERENTIAL I		0.025	in. H₂O	DISCHARGE PI	RESSURE:	0.8 in. H₂O
EFFLUE	NT PUMP IN USE:	#1 <b>√</b>	#2	EFFLUE	NT FEED PUMP P	RESSURE:	7.0 psi
		39 gpm	EFFLUENT	TOTALIZER REA	ADING: 5	6,941,680	197580 gallons
ARE BU	JILDING HEATERS IN U	SE? YES:	√ NO:			INSIDE TEMPE	FRATURE (° F): 69
ıs su	MP PUMP IN USE:	YES:	NO:	ARE ANY L	EAKS PRESENT?	YES:√	NO:
WATE	R LEVEL IN SUMP:	<b>7.0</b> in.	TREATMENT	BUILDING CLEA	N & ORGANIZED?	yes:√	No:

#### NYSDEC Site #90150157

#### SITE INSPECTION FORM

								12	-Jan-1
SAMPLES COLLECTED?	YES:	NO: √	Time of Sampling		рН	Turbidity	Ţemp.	Sp. Cond.	
AIR STRIPPER INFL	UENT:			_					
AIR STRIPPER EFFL	UENT:								
IS THERE EVIDENC	E OF TAMPERING/	VANDALISM	OF WELLS: ?	YES:		NO:	$\sqrt{}$		
•••••			INSPECTED?	YES:	<b>√</b>	- NO:			
	WERE ELECTR	ICAL BOXES	INSPECTED?	YES:	1	 NO:			
IS WATER PRESENT IN	I ANY MANHOLES	OR ELECTRI	CAL BOXES?	YES:	√	NO:			
	es, provide manhole			f any correc	tive meas	ures below:			
PZ-4C is damagd from snowplow									
	<u></u>								
						00MED 0N	MD C's F	<del>-</del>	
INCLUDE:	REMARKS & DESC	RIBE ANY O	THER SYSTEM MA	UNIENAN	CE PERF	OKNIED ON	IVIR. US SI	16	
Remarks: Emptied (2) g	als from Air Stripp	er exhaust di	ip bucket.						
Other Actions: Installed vent	cover over Treatm	ent Room m	an door						
···				/d\ full	l day one				
	ins of (2) old Redi	ax arums inic	present drum. H	ave (1) luli	urum.	<del> </del>			
Changed ba	g filters.	<del></del>	<u> </u>						
			_ <del></del>						
			AGWAY						
SYSTEM VAC		in. H <sub>2</sub>			AIR P	RESSURE:		118 j	psi
	scfm 4.0	psi	SP-5	0.0	scfm		28.5	psi	
	<del></del>	·	SP-6	0.0	scfm	•		psi	
SP-2: 0.0	scfm 28.5	psi		0.0		•		psi	
SP-3: 0.0	scfm 27.5	psi	SP-7		scfm	•		•	
SP-4: 0.0	scfm 29.0	psi	SP-8	0.0	scfm	ր <b></b>	> 30	psı . <b></b>	
INCLUDE	REMARKS & DESC	RIBE ANY O	THER SYSTEM MA	INTENANO	CE PERF	ORMED ON	AGWAY S	ITE	
	on equipment or v								
	, , , , , , , , , , , , , , , , , , , ,		-					-	
Other Actions: Drained (6) g	als from SVE vacu	ium drum		-					

#### NYSDEC Site #9-15-157

#### OM&M: SITE INSPECTION FORM

DATE:	Jan 18,2010	ACTI	VITIES:	Site Inspecti	on		·		
INSPECT	TION PERSONNEL:	R. Allen		OTHER PERSO	ONNEL:		******		
WEATHE	R CONDITIONS: Cloudy, c	old					OUTSIDE TEMP	ERATURE (° F)	30
ARE WE	LL PUMPS OPERATING IN AU	то: YES:_	√	NO:	······································	If "N	JO", provide ex	olanation below	
	<u>.</u>	PROVIDE WA	TER LEV	EL READINGS (	ON CONTR	OL PANEL	<u> </u>		
RW-1	ON: OFF:	√ 10 f	t	PW-5	ON:	<b>√</b>	OFF:		_ft
PW-2	ON: OFF:	√ 6 f	t	PW-6	ON:		off: √		_ft
PW-3	ON: OFF:	√ 5 f	t	PW-7	ON:_		off: √		_ft <sup>-</sup>
PW-4	ON:OFF:_	√ <u>5</u> f	t	PW-8	ON:_		off: <u>√</u>	· <del></del>	_ft
	EQUALIZATION	<i>TANK:</i> 4 f	t	Last	Alarm D/T/Co	ondition: 10/2	29/09 Air Strippe	High Level	
	NOTES:			<del></del> .			· · · · · · · · · · · · · · · · · · ·		
INFLU	ENT FLOW RATE:	69	 jpm 	INFLUENT TO	TALIZER RI	EADING:	4,830,2	40.0	gallons
se	QUESTERING AGENT DRUM I	<i>.evel:</i> 13 _i	nches	(x 1.7	≔) AMOI	UNT OF AGE	NT REMAINING	: <b>22</b>	_gallons
	EQUESTERING AGENT FEED		nl/min		M	ETERING PL	IMP PRESSURE	3.0	_psi
			Тор	Bottom			Тор	Bottom	
	BAG FILTER PRESSURES:	LEFT:_	0	0 psi	RI	IGHT:	6	0	psi 
INFLU	IENT FEED PUMP IN USE:	#1	#2		NFLUENT	PUMP PRES	SURE:	19	_psi
AIR .	STRIPPER BLOWER IN USE:	#1	#2	· √_	AIR STRI	PPER PRES	SURE:	39.0	_in. H <sub>z</sub> O
AIR STR	IPPER DIFFERENTIAL PRESS	URE: 0.0	)2	_in. H₂O	DISCH	ARGE PRES	SURE:	0.9	in. H <sub>2</sub> O
EFFLUE	ENT PUMP IN USE: #1	√ #2		EFFLUI	ENT FEED I	PUMP PRES	SURE:	9.0	_psi
	ENT FLOW RATE: 85		FLUENT	- TOTALIZER RE	EADING:	57,0	80,583	33747	0 gallons
ARE BU	JILDING HEATERS IN USE?	YES:	NO:				INSIDE TEMP	ERATURE (° F)	: 61
ıs su	IMP PUMP IN USE: YES:	√ NO:_		ARE ANY	LEAKS PRI	ESENT?	YES: √	NO	:
WATE	R LEVEL IN SUMP: 7.0	in. TREA	TMENT	BUILDING CLEA	N & ORGA	NIZED?	YES:	NO.	:

#### NYSDEC Site #90150157

#### SITE INSPECTION FORM

SAMPLES COLLECTED? YES:	NO:√							
Sam	ple ID Time	of Sampling		рН	Turbidity	Temp.	Sp. Cond.	
AIR STRIPPER INFLUENT:			_					
AIR STRIPPER EFFLUENT:	· <u>-</u>	<u>-</u>	_					
						. <del></del>		
IS THERE EVIDENCE OF TAMPERING/V	ANDALISM OF WE	ELLS: ?	YES: _	-1	NO:	ν		
	MANHOLES INSPE		YES:_		NO:			
WERE ELECTRIC	CAL BOXES INSPE	CTED?	YES:	<u> </u>	NO:			
IS WATER PRESENT IN ANY MANHOLES			YES:_		NO:	-		
If yes, provide manhole			any correc	ctive meas	ures below:	•		
PZ-4C is damaged from snowplow. Most MWs and U	Es are covered with	ice or snow.		·				
INCLUDE REMARKS & DESC	RIBE ANY OTHER	SYSTEM MA	INTENAN	CE PERF	ORMED ON	MR. C's S	TΕ	
Remarks: Turned Jesco pump down slightly	v: Left 2.4: Right 1	.4.						
Emptied (3) gals from Air Strippe								
Other Actions: Emptied some bag filler change	water through filter	into sump.			<u> </u>			
Exposed all MWs that were cove	red with snow and	ice.		•				
		GWAY						
SYSTEM VACUUM: -23	in. H₂O			AIR P	RESSURE:		10psi	
SP-1: 8.5 scfm 4.0	psi	SP-5	0.0	scfm		29.0	psi	
SP-2: 0.0 scfm 6.5	psi	SP-6	0.0	scfm		> 30	psi	
SP-3: 0.0 scfm 6.5	psi	SP-7	0.0	scfm		> 30	psi	
SP-4: 0.0 scfm 7.0	, psi	 SP-8	0.0	scfm		> 30	psi	
374. <u>0.0</u> 30m <u>1.0</u>					·		· 	-,
INCLUDE REMARKS & DESC	RIBE ANY OTHER	SYSTEM MA	INTENAN	CE PERF	ORMED ON	AGWAY S	ITE	
Remarks:	· · <del></del>			<del></del>		•••		
	,							
Other Actions: Emptied (3) gals from SVE vacu	um drum.							

Jan 18,2010

#### **NYSDEC Site #9-15-157**

#### OM&M: SITE INSPECTION FORM

DATE:	25-Jan-09	ACTIVITIES:	Site Inspection		
INSPEC	TION PERSONNEL: R. A	Allen	_OTHER PERSONNEL:		
WEATHE	ER CONDITIONS: Cloudy, driz	zle, cold		OUTSIDE TEM	PERATURE (° F): 36
ARE WE	LL PUMPS OPERATING IN AUTO	yes: √	NO:	If "NO", provide e	xplanation below
		PROVIDE WATER LEV	/EL READINGS ON CON	TROL PANEL	:
RW-1	ON: OFF: 1	√ 9 ft	PW-5 ON:	off: √	5 ft
PW-2		√ 7 ft	PW-6 ON:		<del>-</del>
PW-3	<del></del>	√ 4 ft	PW-7 ON:	√ off:	8ft
PW-4	ON: OFF:	√ <u>6</u> ft	PW-8 ON:	OFF:	5ft
	EQUALIZATION TA	<i>NK:</i> 4ft	Last Alarm D/T	/Condition: 10/29/09 Air Stripp	er High Level
	<u></u>				
INFLU	JENT FLOW RATE:	50 gpm	INFLUENT TOTALIZER	READING: 5,099	,031.0 gallons
SE	QUESTERING AGENT DRUM LEV	<i>'EL:</i> inches	(x 1.7=) AN	OUNT OF AGENT REMAININ	G:5 gallons
	SEQUESTERING AGENT FEED RA	TE: 6.0 ml/min		METERING PUMP PRESSUR	rE:psi
	BAG FILTER PRESSURES:	Top	Bottom psi	RIGHT: 7	Bottom psi
INFLU	JENT FEED PUMP IN USE:	#1#:	2√INFLUEN	IT PUMP PRESSURE:	18psi
AIR	STRIPPER BLOWER IN USE:	#1 # <i>*</i>	2 √ AIR S1	RIPPER PRESSURE:	39.0 in. H <sub>2</sub> 0
AIR STR	IPPER DIFFERENTIAL PRESSURI	E: 0.02	in. H₂O DISC	CHARGE PRESSURE:	0.8 in. H <sub>2</sub> O
EFFLUI	ENT PUMP IN USE: #1	√ #2	EFFLUENT FEE	D PUMP PRESSURE:	7.5 psi
	JENT FLOW RATE:gpn	n EFFLUENT	TOTALIZER READING:	57,247,827	505590 gallons
ARE B	JILDING HEATERS IN USE?	/es: No	:	INSIDE TEM	PERATURE (° F): 65
is su	IMP PUMP IN USE: YES:	NO:	ARE ANY LEAKS F	PRESENT? YES: V	NO:
WATE	R LEVEL IN SUMP: 8.0 in.	TREATMENT	BUILDING CLEAN & OR	GANIZED? YES: √	NO:

#### NYSDEC Site #90150157

#### SITE INSPECTION FORM

AIR STRIPF  IS THERE  IS WATER PR	PER INFLUENT: PER EFFLUENT: EVIDENCE OF TA WEF	AMPERINGA WERE MANHOLES ( VIDE MANHOLES ( VIDE	MANHOLE CAL BOXE OR ELECT: /electric box UEs are unc	ES INSPECTE ES INSPECTE RICAL BOXE  X ID and descr	: ? D? D? S? iption of a	g rain.	pH	NO:_ NO:_ NO:_	Temp.	Sp. Cond.	
AIR STRIPF  IS THERE  IS WATER PR  -4C is damaged from	PER EFFLUENT:  EVIDENCE OF TA  WEF  ESENT IN ANY IV  If yes, provin snowplow. Many  NCLUDE REMARK	AMPERINGA WERE MANHOLES ( VIDE MANHOLES ( VIDE	VANDALISI MANHOLE CAL BOXE OR ELECTI /electric box	M OF WELLS ES INSPECTE ES INSPECTE RICAL BOXE  X ID and describer puddles fro	: ? D? D? S? iption of a	YES: YES: YES: any correc	√ √ √	NO: NO: NO: NO:	√	Sp. Cond.	
AIR STRIPF  IS THERE  IS WATER PR  -4C is damaged from	PER EFFLUENT:  EVIDENCE OF TA  WEF  ESENT IN ANY IV  If yes, provin snowplow. Many  NCLUDE REMARK	WERE ANHOLES (MANHOLES (MA	MANHOLE CAL BOXE OR ELECT /electric box JEs are unc	ES INSPECTE ES INSPECTE RICAL BOXE  X ID and descr	D?  S? iption of a	YES: YES: YES: any correc	√ √ √ tive measi	NO:_ NO:_ NO:_		-	
IS THERE  IS WATER PR	EVIDENCE OF TA  WER ESENT IN ANY IN If yes, provin snowplow. Many	WERE ANHOLES (MANHOLES (MA	MANHOLE CAL BOXE OR ELECT /electric box JEs are unc	ES INSPECTE ES INSPECTE RICAL BOXE  X ID and descr	D?  S? iption of a	YES: YES: YES: any correc	√ √ √ tive meas	NO:_ NO:_ NO:_		-	
IS WATER PR	WER ESENT IN ANY IN If yes, provin snowplow. Many	WERE ANHOLES (MANHOLES (MA	MANHOLE CAL BOXE OR ELECT /electric box JEs are unc	ES INSPECTE ES INSPECTE RICAL BOXE  X ID and descr	D?  S? iption of a	YES: YES: YES: any correc	√ √ √ tive meas	NO:_ NO:_ NO:_		-	4 00 00
Z-4C is damaged from	If yes, proving snowplow. Many	RE ELECTRIC MANHOLES (	CAL BOXE OR ELECT /electric box	S INSPECTE RICAL BOXE x ID and describer puddles fro	D? S? iption of a om ongoin	YES:YES:	√ √ √ tive measu	NO: _ NO: _		- -	w en en en
Z-4C is damaged from	If yes, proving snowplow. Many	MANHOLES (  vide manhole/ y MWs and L	OR ELECT	RICAL BOXE  x ID and descr	S? iption of a	YES: any correc g rain.	tive meas	NO:		- - -	
Z-4C is damaged from	If yes, prov	y MWs and L	/electric box	x ID and descr	iption of a	g rain.	√ tive meas	-			
	n snowplow. Man	y MWs and L	JEs are und	der puddles fro	om ongoln	g rain.	tive meas	ures below:		77	
	NCLUDE REMAR	KS & DESC									
			RIBE ANY	OTHER SYS							
			RIBE ANY	OTHER SYS							
ther Actions: Rec	orded information								:		
				AGV	VAY_		·				
SY	STEM VACUUM:	-23	in. H	1₂O			AIR PI	RESSURE: _	-	110	_psi
SP-1:6	5.8 scfm	4.0	psi	s	P-5	0.0	scfm	-	29.0	_psi	
SP-2:(	),0 scfm	27.5	psi	s	P-6	0.0	scfm	-		_psi	
SP-3:	.2 scfm	26.0	psi	s	P-7	0.0	scfm	-	> 30	psi	
SP-4:(	).0 scfm	27.0	psi	s	P-8	0.0	scfm		> 30	_psi 	
	NCLUDE REMAR	KS & DESC	RIBE ANY	OTHER SYST	TEM MAII	NTENANC	E PERFC	RMED ON	4GWAY S	SITE	
	orded informatio				<u></u> _						

#### NYSDEC Site #9-15-157

#### OM&M: SITE INSPECTION FORM

DATE:	1-Feb-10	<u> </u>	ACTIVITIES:	Site Inspectio	n	·		
INSPECT	TON PERSONNEL:_	R. Allen		OTHER PERSO	NNEL:			
WEATHE	R CONDITIONS: C	loudy, cold		<del></del>		OUTSIDE TEMPEI	RATURE (° F):	25
ARE WE	LL PUMPS OPERATI	NG IN AUTO:	YES:	NO:		"NO", provide expl	anation below	,
•								
		PRO\	/IDE WATER LEV	EL READINGS O	N CONTROL PANE	<u>.</u>		
RW-1	ON:	off: <u>√</u>	7ft	PW-5	ON:	0FF: <u>√</u>	ft	
PW-2	ON:	off:	<u>6</u> ft	PW-6	on:	OFF:	ft	
PW-3	ON:	off:	ft	PW-7	on:	OFF:	ft	
PW-4	ON:	off: <u>√</u> _	5_ft	PW-8	ON:	0FF:√	5ft	
	EQUAI NOTES:	LIZATION TANK:		Last Al	arm D/T/Condition: 1	0/29/09 Air Stripper H	ligh Level	
INFLU	ENT FLOW RATE:	38	gpm	INFLUENT TOTA	ALIZER READING:	5,385,76	6.0 ga	llons
SEQUESTERING AGENT DRUM LEVEL: 23 inches (x 1.7=) AMOUNT OF AGENT REMAINING: 39 gallons								
s	EQUESTERING AGE	NT FEED RATE:	6.0 ml/min		METERING	PUMP PRESSURE:	3.0ps	i
			Тор	Bottom		Тор	Bottom	
	BAG FILTER PRES	SURES:	LEFT: 0	0 psi	RIGHT:	6	ps	i 
INFLU	IENT FEED PUMP IN	USE: #1	#2	2	FLUENT PUMP PRI	ESSURE:	18ps	i 
AIR :	STRIPPER BLOWER	IN USE: #1_	#2	2	AIR STRIPPER PRI	ESSURE:	40.0 in.	H₂O
AIR STR	IPPER DIFFERENTIA	L PRESSURE:	0.015	_in. H₂O	DISCHARGE PRI	ESSURE:	0.8 in.	H₂O
EFFLUE	 ENT PUMP IN USE:	#1 V	#2	EFFLUE	NT FEED PUMP PRI	ESSURE:	9.0 ps	 i
	ENT FLOW RATE: _	88 gpm	EFFLUENT	- TOTALIZER REA	DING:57	,426,377	684810 ga	llons
ARE BU	JILDING HEATERS IN	USE? YES:				INSIDE TEMPE	RATURE (° F):	60
ıs su	MP PUMP IN USE:	YES:	NO:	ARE ANY L	EAKS PRESENT?	YES: √	NO:	
WATE	R LEVEL IN SUMP: _	6.0 in.	TREATMENT	BUILDING CLEAR	I & ORGANIZED?	YES:√	NO:	

#### NYSDEC Site #90150157

#### SITE INSPECTION FORM

											1-Feb-10
SAMPLES COLL	ECTED?	YES:	√	NO:							
			Sam	ple ID	Time of Sampli	ng	рН	Turbidity	Temp.	Sp. Cond.	
AIR ST	RIPPER INF	LUENT:				_			_		_
AIR ST	RIPPER EFF	LUENT:	_			-					<del>-</del>
	DE EMDEN	CE OF TA	MDEDINGA		M OF WELLS: ?	YES:		NO:	√ √		
is in∈	KE EVIDEN	CE OF TA			ES INSPECTED?	YES:		 NO:	1	-	
		WER.			ES INSPECTED?	YES:	V	NO:		_	
IS WATER	R PRESENT				RICAL BOXES?	YES:	V	NO:		_	
,					x ID and description	of any correc	tive mea	- sures below:			
PZ-4C is damaged	by snowploy	v. Most M	Ws and UEs	are cover	ed with ice or snow.						<del></del>
	INCLUD	E REMARI	(S & DESCI	RIBE ANY	OTHER SYSTEM	MAINTENAN	CE PERF	ORMED ON	MR. C's S	SITE	
Remarks:					pipe drip bucket.						
Kemarks.	STIPHEG (+)	gaio ii oi ii	7 til Outppo	1 0,11,000							
Other Actions:	<del> </del>										
. <del>.</del>				<del></del> ,				· <u> </u>			<del></del>
					AGWAY						
<u>.                                    </u>	SYSTEM V	ACUUM:	-23	in.			AIR F	RESSURE:		105	psi
	> 10	scfm	4.0	psí	SP-5	0.0	scfn	- 1	29.0	psi	
SP-2:	0.0	scfm	18.0	psi	SP-6	0.0	scfn	-	> 30	-· psi	
SP-3:	0.0	scfm	17.0	psi	SP-7	0.0	scfn	-	> 30	-· psi	
SP-4:	0.0	scfm	17.5	psi	SP-8	0.0	scfn	-	> 30	<b>-</b>	
ər-4 											
	INCLUD	E REMAR!	(S & DESCI	RIBE ANY	OTHER SYSTEM I	<u>NAINTENAN</u>	CE PERF	ORMED ON A	AGWAY S	SITE	
Remarks:											
					<del></del>						
Other Actions:	Emptied (5)	gals from	SVE vacuu	ım drum.							
										<del></del>	

#### Mr. C's CLEANERS OM&M

#### SUMMARY OF FIELD ACTIVITIES BY IEG - 1/2010

DATÈ	ACTIVITY
1-Jan	OM&M Weekly Inspection and office work.
5-Jan	OM&M Weekly Inspection and sampling.
6-Jan	End of month summary.
12-Jan	OM&M Weekly Inspection. Emptied remains of (2) old Redux drums into present drum. Installed vent cover in Treatment Room. Changed bag filters.
13-Jan	Office work
18-Jan	OM&M Weekly Inspection. Exposed MWs that were covered with ice or snow.
19-Jan	Office work
20-Jan	Shovel ice or snow off of MWs.
23-Jan	Piezometer Readings
24-Jan	Piezometer Readings
25-Jan	OM&M weekly inspection. Piezometer readings. Office work.
26-Jan	Office research
27-Jan	Treatment Room - clean and photo blower motor/fan #1 and #2. Agway Shed - clean and photo SVE blower motor/fan. Office work.
28-Jan	Shovel snow in front of Treatment Room. Record information on blower motor/fan #1 and #2. Agway Shed - record information on SVE blower motor/fan. Office work.

#### Mr. C's CLEANERS OM&M STATUS OF OM&M ACTIVITIES BY IEG

as of 01/31/10

		as 01 0 1/3 1/10
ACTIVITY	DESCRIPTION	COMPLETION DATE/STATUS
Repair PW-5	Pump will not turn OFF. Inspected/cleaned transducer. Raised level of transducer one foot.	Sep-09
Repair PW-4	Reads a constant water level 8 on PanelView. Clean and inspect pump. Purge well and flush flexible pipe. Shorten transducer wire and replace aneroid bellows.	Sep-09
Repair PW-8	Pump does not work. Replace flexible pipe and well pump.	Sep-09
Repair Redux Pump	Jesco America Corp (JAC) pump is leaking. Inspect and clean pump, Replace broken and old plastic hose clamps with metal ones. Tighten plastic fittings.	Sep-09
Cleän Air Stripper	Cleaned Air Stripper trays. Assembled Industrial brushes and power sprayer to clean trays through access ports. This cleaning method has proven cost effective by reducing the frequency of tear downs.	Sep-09
Repair PZ-2B	The MW ring and concrete cap have been pushed down by heavy equipment until the metal top cover is in contact with the riser cap. Adjust piezometer parts.	Oct-09
Repair Effluent Pipe Vacuum Release	Effluent Vent Vacuum Release leaks. Replaced with new vent valve and cut vent pipe shorter to reduce motion when pump turns ON.	Oct-09
Measure Backflow in Treatment Room	Get Aaron Bender Plumbing to measure backflow in Treatment Room.	Oct-09
Do MW Damage Report	E & E, Inc has requested a damage report for all the MWs that are in the Monthly Piezometer Water Level Log. Inspect the MWs.	Nov-09
Repair Redux Line	The "T" fitting that joins the pickup line and measuring guage line to the Jesco pump has corroded apart. Replace "T" fitting and hose clamps.	Nov-09
Replace SVE Vacuum Drum	Present Vacuum Drum inside Agway Shed is corroded. Replace drum.	To be ordered
AS / SVE System Evaluation	Agway Shed - test and evaluate air sparge system and Soil Vapor Extraction system. Installed fittings to measure pressure and flow. Tested air sparging and SVE lines.	in progress
Service Compressor	Champion Machinery reveals the compressor is a 1992 model. Compressor pump should be serviced which includes a valve kit. The belts should also be adjusted.	in progress
Level PW-4 Well and Box	Asphalt around PW-4 and its Underground Enclosure has sunk, leaving these structures vulnerable to damage. Bring parking lot up to level with asphalt patch.	in progress
Install MW Ring	Piezimeter in Agway Site parking lot was damaged by the road repair crew. To instal new Monitoring Well Ring around damaged Piezometer for protection.	in progress
Rebuild Automatic Tank Drain Valve (ATDV)	Factory recommends rebuilding the ATDV on a compressor of this age. Order rebuild kit and repair. Have purchased rebuild kit.	in progress
Rebuild JAC Pump as needed	Jesco America Corp recommends rebuilding the Redux pump when needed. Purchased rebuild kit.	in progress
RW-1 Replace Motor Starter	RW-1 motor starter developed problem and had to be rewired. Should get a spare motor starter in anticipation of further problems.	in progress
Repair PZ-4C	PZ-4C was damaged by a Town of Aurora snowplow. Top of inner ring and top cover were broken. Talked to Town and they placed a temporary cover inside the well to reduce the pedestrian tripping hazard. Ring and top cover should be replaced. If well is not to be used - cover with concrete cap.	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
Purge PW-5	inspect, purge well, clean pump, plastic pipe and transducer. Trouble shoot problems.	in progress
Blower Motor / Fan #1 and #2 - obtain information	Room. Obtain further information from the manufacturer.	Jan-10
SVE System Blower Motor/Fan - obtain info	Record information on Agway Shed SVE blower motor. Obtain further information from the manufacturer.	Jan-10
Add ball valves to Bag Filter Housing drain pipes	When changing bag filters, the housings must be drained. The drain pipe ball valves are near the housings and cannot be reached from the end of the pipes where the water is collected. Add ball valves near the ends of the drain pipes to ease the bag filter changing process.	in progress

Mr. C's CLEANERS OM&M

# SUMMARY OF WATER PUMP MAINTENANCE BY IEG

_
2
_
æ
_
ö
æ
w

ū	CLEAN & INSPECT PUMP	REPLACE	REPAIR	PIPE & PITLESS ADAPTER	CLEAN & INSPECT TRANSDUCER	REPLACE TRANSDUCER	REPAIR TRANSDUCER	PUMP OUT WELL	CLEAN OUT & INSPECT ELECTRICAL BOX	ELECTRICAL BOX REPAIR
RW - 1		Feb-08								
PW-2	Aug 09	Jul-08			Aug-10	Sep-09		Aug-10		Sep-09
PW - 3	Aug-10	Jul-08		Repair adapter	Aug-10			Aug-10		
PW - 4	Sep 09	Dec-07						Jul 09, Sep 09	60-deS	Sep-10
PW - 5		Jul-08			Sep-10	•	Sep-09			
9- Wd	Jul-10	Jun 08, Jul 09		Replace pipe 8/09	Apr 09, Aug 09	60-deS	-	Aug.10	Aug 09, Sep 09	Jul 09, Sep 09
7 - Wd	01-ไทเ	Nov 07, Jul 09		Replace pipe 8/09	Aug-10			Aug-10		
PW - 8	Aug 09	Jul 08, Sep 09		Replace pipe 8/09	Aug-10			Aug-10		

### Attachment B Analytical Report from Mitkem Laboratories

Analytical Data Package Work Order ID: J0010 Sampled: January 5, 2010

#### Analytical Data Package for Ecology & Environment Engineering, P.C. (EEEPC)

Client Project No.: Mr. C's Dry Cleaners Site (Compliance)

Mitkem Work Order ID: J0010
January 14, 2010

Prepared For:

Ecology & Environment Engineering P.C.

368 Pleasantview Drive Lancaster, NY 14086 Attn: Mr. Michael Steffan

Prepared By:

Mitkem Laboratories

175 Metro Center Boulevard

Warwick, RI 02886 (401) 732-3400

#### **SDG** Narrative

Mitkem Laboratories submits the enclosed data package in response to Ecology & Environment, Inc's Mr. C's Dry Cleaners (Compliance) project. Under this deliverable, analyses results are presented for two aqueous samples that were received on January 6, 2010. Analyses were performed per specifications in the project's contract and the chain of custody form. Following the narrative is the Mitkem Work Order for cross-referencing client sample ID and laboratory sample ID.

The analyses were performed according to NYSDEC ASP protocols (2000 update) and reported per NYSDEC ASP requirement for Category A deliverable with the exception of hardness and pH. The analysis results for hardness and pH are presented in the standard Mitkem format.

The following observation and/or deviations are observed for the following analyses:

#### 1. Overall observation:

The enclosed report includes the originals of all data with the exception of logbook pages and certain initial calibrations. Photocopies of logbook pages are included, with the originals maintained on file at the laboratory. The originals of initial calibrations that are shared among several cases are maintained on file at the laboratory, with photocopies included in the data package.

#### 2. Volatile Analysis:

To meet specific project requirements, a 1ppb standard was analyzed in the initial calibration to achieve a lower reporting limit. All the target analytes, with the exception of the ketones have been reported to 1ppb. The ketones have been reported to 5 ppb.

Trap used for instruments V2: OI Analytical #10 trap containing 8 cm each of Tenax, silica gel and carbon molecular sieve.

GC column used:  $30 \text{ m} \times 0.25 \text{ mm}$  id (1.4 um film thickness) DB-624 capillary column.

Aqueous samples were hydrochloric acid preserved, pH <2.

Surrogate recovery: recoveries were within the QC limits.

Laboratory control sample: spike recoveries were within the QC limits with the exception of marginally high recovery of acetone in LCS-48482.

Sample analysis: due to high concentration of tetrachloroethene, sample INFLUENT was analyzed at 10x dilution. No other unusual observation was made for this analysis.

#### 2. Wet Chemistry Analyses:

Duplicate analysis: duplicate analysis was performed on sample EFFLUENT for pH. Replicate RPD was within the QC limits.

Sample analysis: no unusual observation was made for the analysis.

All pages in this report have been numbered consecutively, starting with the title page and ending with a page saying only "Last Page of Data Report".

I certify that this data package is in compliance, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package has been authorized by the laboratory manager or his designee, as verified by the following signature.

Gusk Huntley
Agnes Huntley

CLP Project Manager

01/14/10

CHAIN OF CUSTODY RECO		Project N	r indici	Site Nam	Location	Sampler	T	ist prese	N				20	<u>۸</u> د				_
H		<u>-</u>	<del>-</del>	 	<u></u> —				4			53	rauf	not	4		>	-
X	,	1		İ				3 45+3 P(S)					y	10				_
								H		ers			oites.	1 <del>1</del> 10	#		1	_
$\overline{O}$	ot	Lnc					į Ž	7=CH3OH		Containers.			lear C					_
Ţ		· 1					RON			Ce.			mper					
	Page	77						Acid	Ì			slsi'	7 AO	Vìo	#			_
${\mathbb C}$		巨名匠						rbic,	]]=				3	latrix	N.	S N	GW	
H H				. ]				6=Ascorbic Acid	ļ			ļ		λĎε	L	Q	7	)
$\mathcal{O}$		e To:					٠٠٠ <u>-</u>		Ì	:						<u>.</u>		-
		Invoice To:					P.O. No.:	\a0H		water	=Air				Time:	2;30P	2,30 P	ا
Y.					<u>'</u>		 	<u></u>		Vaste	e.				Ţ	2,	2,3	
					ì	1		1=Na <sub>2</sub> S2O <sub>3</sub> 2=HCl 3=H <sub>2</sub> SO <sub>4</sub> 4=HNO <sub>3</sub> 5=NaOH	10 	WW=Wastewater	SL=Sludge A=Air	X3= _					<u> </u>	_
				9				4=H		ļ	S	1	site		Date:	01/5/	-	
	NOLOGY			4086			۲	Q.		wafe	Soil		C=Composite		I	3/1	,	
	A DIVISION OF SPECTRUM ANALYTICAL, INC. FORUTING HANIBAL TECHNOLOGY	Inc	Ď	7			Mille Steffan	=H <sub>2</sub> S		CONTRO	SO=Soil		Ü				1	-
	ine HANIE	الح	<del> </del>	>			S	1 3		V=G	; ; j <u>a</u> j		ap		Id:	INFLUENT	NPLUENT	
	INC. Featur	Ш	Pleasant	-	_		Je Je	HC	9=	1 &	SW= Surface Water	X2=,	G=Grab		Sample Id:	3	2	
MITKEM Laboratories	LYTICAL,	ERE	Pie	Lancaster			M	]		Vater	urfac				Sa	NP	7	
l K   RATC	RUM ANA		(v)	2				32ZC	8=NaHSO4	Tho V	N=S							
AI.	OF SPECT	t To:	36	7			ıt Mg	<u>                                    </u>	8= N	Orink	S			2	Lab Id:	Ì	1	
	A DIVISION	Report To:	1	:			Project Mgr.:			DW=Drinking Wafer GW=Groundwafer	0=0il	XI=		J0010	Lab		がない	
- <del> </del>					<u> </u>	•		I <u>.</u>					L	1.,		赤 花		8.

. Time: State specific reporting standards: All TATs subject to laboratory approval. Notes: QA/QC Reporting Level ☐ Level IV □ Level II Min. 24-hour notification needed for rushes. 01:21 · Samples disposed of after 60 days unless State: Special Handling: TAT- Indicate Date Needed: \_ Dates ☐ Level III S Other □ Level I OMAMO watwe code below otherwise instructed. 450 G 411en Analyses MrCs Received by 下ast ا ن (S) 0 Relinguished by کم 2:30P 6 GW 2 **™** 3 <u>ვ</u> Q Q Ø 2:30 P 2:30 P 2130 P ene, com Condition upon receipt. Weed 15 Ambrail N.S. B.E-mail to M.Staffan @ EFFLUENT EPFLUE NT INFLUENT EFFLUENT EDD Format

175 Metro Center Boulevard • Warwick, RI 02886-1755 • 401-732-3400 • Fax 401-732-3499 • www.mitkem.com

0006



\* Volatiles \*

#### 1A - FORM I VOA-1 VOLATILE ORGANICS ANALYSIS DATA SHEET

	CLIENT	SAMPLE	NO.
Ī	INFLUE:	NT	
ı			
1			

Lab Name: MITKEM LAB	ORATORIES		Contract:		
Lab Code: MITKEM	Case No.: J0010		Mod. Ref No.:	SDG No.: SJ0010	)
Matrix: (SOIL/SED/WAT	'ER) WATER		Lab Sample ID:	J0010-01A	
Sample wt/vol:	5.00 (g/mL) ML		Lab File ID:	V1L0200.D	
Level: (TRACE/LOW/MEI	) LOW		Date Received:	01/06/2010	
% Moisture: not dec.			Date Analyzed:	01/08/2010	
GC Column: DB-624	ID: 0.25	(mm)	Dilution Factor:	10.0	
Soil Extract Volume:		_ (uL)	Soil Aliquot Vol	ume:	(uL)
Purge Volume: 5.0		(mL)			

CAS NO.	COMPOUND	CONCENTRATION UNIT	S: μG/L	Q
75-71-8	Dichlorodifluoromethane		50	Ū
	Chloromethane		50	ַ <u></u>
	Vinyl chloride		50	ַ ט
	Bromomethane		50	U
	Chloroethane		50	Ū
	Trichlorofluoromethane		50	ט
	1,1-Dichloroethene		50	Ū
	Acetone		50	Ū
	Carbon disulfide		50	ט
	Methylene chloride		1.1	J
	trans-1, 2-Dichloroethene		50	U
	Methyl tert-butyl ether		11	J
75-34-3	1,1-Dichloroethane		50	Ü
	2-Butanone		50	Ü
156-59-2	cis-1,2-Dichloroethene		29	J
67-66-3	Chloroform		50	Ū
	1,1,1-Trichloroethane		50	ַ
56-23-5	Carbon tetrachloride		50	Ū
	1,2-Dichloroethane		50	U
	Benzene		50	ט
	Trichloroethene		69	
	1,2-Dichloropropane		50	U
	Bromodichloromethane		50	Ū
	cis-1,3-Dichloropropene		50	ט
	4-Methyl-2-pentanone		50	U
	Toluene		50	Ū
	trans-1,3-Dichloropropene		50	Ū
79-00-5	1,1,2-Trichloroethane		50	ט
127-18-4	Tetrachloroethene		1300	
	2-Hexanone		50	ט
	Dibromochloromethane		50	ַ ט
	1,2-Dibromoethane		50	ט
	Chlorobenzene		50	ט
	Ethylbenzene		50	ט
	Xylene (Total)		50	Ū

#### 1B - FORM I VOA-2 VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT	SAMPLE	NO.
INFLUE	NT	

Lab Name: MITKEM LABORATORIES	Contract:
Lab Code: MITKEM Case No.: J0010	Mod. Ref No.: SDG No.: SJ0010
Matrix: (SOIL/SED/WATER) WATER	Lab Sample ID: J0010-01A
Sample wt/vol: 5.00 (g/mL) ML	Lab File ID: V1L0200.D
Level: (TRACE/LOW/MED) LOW	Date Received: 01/06/2010
% Moisture: not dec.	Date Analyzed: 01/08/2010
GC Column: DB-624 ID: 0.25 (F	nm) Dilution Factor: 10.0
Soil Extract Volume: (1	uL) Soil Aliquot Volume: (uL)
Purge Volume: 5.0 (n	nL)

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

#### 1A - FORM I VOA-1 VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT	SAMPLE	NO.	
EFFLUE	NT		
l .			-1

Lab Name: MITKEM LABOR	ATORIES			Contract:	
Lab Code: MITKEM	Case No :	J0010		Mod. Ref No.:	SDG No.: SJ0010
Matrix: (SOIL/SED/WATER	R) WATER			Lab Sample ID:	J0010-02A
Sample wt/vol: 5.	00 (g/mL)	ML		Lab File ID:	V1L0199.D
Level: (TRACE/LOW/MED)	LOW			Date Received:	01/06/2010
% Moisture; not dec.				Date Analyzed:	01/08/2010
GC Column: DB-624	ID:	0.25	(mm).	Dilution Factor:	1.0
Soil Extract Volume:	<del></del>		(uL)	Soil Aliquot Vol	ume: (uL)
Purge Volume: 5.0			- (mL)		

		CONCENTRATION UNITS:	
CAS NO.	COMPOUND	(ug/L or ug/Kg) µG/L	Ω
75-71-8	Dichlorodifluoromethane	5.0	U
	Chloromethane	5.0	ט
	Vinyl chloride	5.0	שׁ
74-83-9	Bromomethane	5.0	ט
	Chloroethane	5.0	ט
	Trichlorofluoromethane	5.0	U
	1,1-Dichloroethene	5.0	Ü
	Acetone	5.0	ט
	Carbon disulfide	5.0	U
	Methylene chloride	5.0	Ū
156-60-5	trans-1,2-Dichloroethene	5.0	ט
1634-04-4	Methyl tert-butyl ether	5.0	U
75-34-3	1,1-Dichloroethane	5.0	ָ <u>.</u>
78-93-3	2-Butanone	5.0	U
156-59-2	cis-1,2-Dichloroethene	5.0	ט
	Chloroform	5.0	ַ <u>"</u>
71-55-6	1,1,1-Trichloroethane	5.0	ט
56-23 <b>-</b> 5	Carbon tetrachloride	5.0	ט
	1,2-Dichloroethane	5.0	ט
71-43-2	Benzene	5.0	ָּט
79-01-6	Trichloroethene	5.0	ט
78-87-5	1,2-Dichloropropane	5.0	Ū
75-27-4	Bromodichloromethane	5.0	Ū
10061-01-5	cis-1,3-Dichloropropene	5.0	ַט
108-10-1	4-Methyl-2-pentanone	5.0	ט
108-88-3	Toluene	5.0	U
10061-02-6	trans-1,3-Dichloropropene	5.0	Ŭ
79-00-5	1,1,2-Trichloroethane	5.0	U
	Tetrachloroethene	5.0	U
	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	5.0	U
	1,2-Dibromoethane	5.0	ΰ
108-90-7	Chlorobenzene	5.0	U
	Ethylbenzene	5.0	U
1330-20-7	Xylene (Total)	5.0	ט

#### 1B - FORM I VOA-2 VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT	SAMPLE	NO.
EFFLUE)	NT	
		1

Lab Name: MITKEM LABORATORIES	Contract:	
Lab Code: MITKEM Case No.: J0010	Mod. Ref No.: SDG No.: SJ0010	
Matrix: (SOIL/SED/WATER) WATER	Lab Sample ID: J0010-02A	
Sample wt/vol: 5.00 (g/mL) ML	Lab File ID: V1L0199.D	
Level: (TRACE/LOW/MED) LOW	Date Received: 01/06/2010	
% Moisture: not dec.	Date Analyzed: 01/08/2010	
GC Column: DB-624	(mm) Dilution Factor: 1.0	
Soil Extract Volume:	(uL) Soil Aliquot Volume: (t	uL)
Purge Volume: 5.0	(mL)	

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	μG/L	Q
100-42-5	Styrene		5.0	Ü
	Bromoform		5.0	ט
98-82-8	Isopropylbenzene		5.0	ט
79-34-5	1,1,2,2-Tetrachloroethane		5.0	ט
	1,3-Dichlorobenzene		5.0	ט
106-46-7	1,4-Dichlorobenzene		5.0	Ü
95-50-1	1,2-Dichlorobenzene		5.0	Ū
96-12-8	1,2-Dibromo-3-chloropropane		5.0	ט
120-82-1	1,2,4-Trichlorobenzene		5.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane		5.0	U
	Cyclohexane		5.0	U
	Methyl acetate		5.0	ט
	Methylcyclohexane		5.0	U



\* Wet Chemistry \*

#### Mitkem Laboratories

Date: 12-Jan-10

Client: Ecology and Environment Engineering P.C.

Client Sample ID: INFLUENT

Lab ID: J0010-01

Project: Mr. C's Dry Cleaning

Collection Date: 01/05/10 14:30

Analyses	. Result Qual	RL Units	DF Date Analyzed	Batch ID
SM 2340 HARDNESS by Calculation			<del></del> -	SM2340_W
Hardness, Ca/Mg (As CaCO3)	530	4.0 mg/L CaCO3	1 01/08/2010 9:34	48447
SM 4500 pH - pH VALUE				SM4500_H+
рН	7.0	1,0 S.U.	1 01/06/2010 16:00	R45013

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation 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

#### Mitkem Laboratories

Date: 12-Jan-10

Client: Ecology and Environment Engineering P.C.

Client Sample ID: EFFLUENT

Lab ID: J0010-02

Project: Mr. C's Dry Cleaning

Collection Date: 01/05/10 14:30

Analyses	Result Qual	RL Units	DF Date Analyzed	Batch ID
SM 2340 HARDNESS by Calculation				SM2340_W
Hardness, Ca/Mg (As CaCO3)	540	4.0 mg/L CaCO3	1 01/08/2010 9:37	48447
SM 4500 pH pH VALUE				SM4500_H+
рН	7.9	1.0 S.U.	1 01/06/2010 16:05	R45013

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 2010

Mr. C's Drv C	leaners Site	- Remedia	Mr. C's Dry Cleaners Site - Remedial Treatment Utility Costs	tv Costs							ATTAC	ATTACHMENT C
NYSDEC Work Assignment #DC13.02.01.01	rk Assignme	ent #DC13.0	12.01.01					Utility Budget:		Electric:	\$25,800.00	
12 Months of	System Op	eration and	12 Months of System Operation and Maintenance							Telephone:	\$540.00	
January 2010 Report	) Report									Gas	\$720.00	
Gas, Telephone, and Electric	and Electric	- 1								- Control of the cont	10	
Utility Provider	Account #	E&E Cost Center	Description	Jan-2009	Feb-2009	Mar-2009	Apr-2009	May-2009	SOOZ-UNC			
New York State E&G	06-311-11-002616-26	002700.DC13.02.01	06-311-11-002616-26 002700.DC13.02.01 Mr. C's Electric Costs									
New York State E&G	76-311-11-015900-18		Agway Site - Electric									
National Fuel Gas	5819628-05		002700.DC13.02.01 Mr. C's Natural Gas Costs	\$168.02								
			Totals	\$ 168.02	- \$	€9-	\$	·	s			
				Jul-2009	Aug-2009	Sep-2009	Oct-2009	Nov-2009	Dec-2009			Ave. /Month
			Mr. C's Electric Costs	-							\$	•
			Agway Electric				ŧ				8	•
			Mr. C's Natural Gas Costs	<del></del>							\$	168.02
			Totals	\$0.00			\$ -		. \$		\$	168.02
			Electric		\$0.00							
			Natural Gas		\$ 168.02			Overbilled natu	Overbilled natural gas costs - no charges	no charges	- 11	
	Grand Total - N	YSE&G/National I	Grand Total - NYSE&G/National Fuel Gas Costs To Date	€	168.02	r - Chall		Estimated Reading	ading	\$ 333.44	in red -adjusted billing	oilling
Phone												
Utility Provider	Phone #	E&E Cost Center	Location Description	Jan-2009.	Feb-2009	Mar-2009	Apr-2009	May-2009	Jun-2009			
Verizon	716-652-0094	002700.DC13.02.01	002700.DC13.02.01.Mr. C's Telephone Costs									
Account#												
716 652 0094 416 26 2												
				Jul-2009	Aug-2009	Sep-2009	Oct-2009	Nov-2009	Dec-2008			Ave./Month
					•							,
		Grand Total -	Grand Total - Verizon Costs to Date	<b>\$</b>								
		Grand Total	Grand Total All Utilities To Date	s,	168.02							
-												

Mr. C's Dry Cleaners Site - Remedial Treatment Utility	ite - Remedia	Treatment Utili	ty Cost	Budget Remaining:		Electric:	\$25,800.00	ATTACHMENT C
NYSDEC Work Assignment #DC13	nent #DC13					Telephone:	\$540.00	
12 Months of System Operation and Maintenance	peration and	Maintenance				Gas	\$551.98	•
January 2010 Report					,	Total:	\$26,891.98	
			Capacity	Comments:				-
January-10 648	648	100.00%	21.4%	Cold January				
February-10		#DIV/0!						
March-10		i0/AlC#						
April-10		#DIV/0i						
May-10		#DIV/0!						
June-10		:0/AIC#						
Anglist-10		:0/21C#						
September-10		#DIV/UI						
October-10		#DIV/0i						
November-10		#DIV/0i						
December-10		#DIV/0!						
Totals to Date 648	648	100.00%						
* Percent Capacity is based on initial operating groundwater flows from the eight installed pumps from 9/02. Evaluated on total gallonsdischargedfor monthly operating time.	ng groundwater flows fro	m the eight installed pumps fro	om 9/02. Evaluat	ted on total gallonso	dischargedfor n	nonthly operatir	g 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.	ı average of 78 gpm as t	ne total for all 8 pumps at the si	ite if all pumps o	perate 100%. With	the exception	of groundwater	งบmp RW-1, all others ณ	
								Total Gallons
Monthly Average Costs								861376
Mr. C's Electric \$	1							
Agway Electric \$ -								
Mr. C's Gas \$ 168.02	.02							
Mr. C's Telephone   \$				•				
Ave. Utility Cost Total   \$ 168.02	.02 times	12 month Estimate	\$2,184.26					