Sampling and Analysis Report Lockport City Landfill

Site No. 932010 City of Lockport

December 2009

Amherst, New York

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SAMPLING AND ANALYSIS REPORT LOCKPORT CITY LANDFILL SITE NO. 932010

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SECTION 1 - INTRODUCTION

The Lockport City Landfill site is located on Oakhurst Street in the City of Lockport, Niagara County, New York. The landfill, assigned the Site Registry Number 9-32-010, is the subject of this report.

The Remedial Action Design as approved by the NYSDEC for the site; included a Long Term Monitoring Plan and Operation and Maintenance Plan. The purpose of the long term monitoring plan is to provide information to evaluate and monitor the long term effectiveness of the remedial work. The Operation and Maintenance Plan includes regular site inspections and analytical testing to identify any potential problems at the landfill that are not being adequately addressed by routine maintenance, and to document the current condition of the landfill. A site plan of the Lockport City Landfill is presented on Figure 1.

The Long Term Monitoring Program started in 1997; six (6) events were conducted in the first five (5) years (two events in 1997 and one event per year afterwards). This is the 3rd monitoring event of the Long Term Monitoring contract between Stearns & Wheler, LLC and the City of Lockport that monitoring through 2011. The purpose of this report is to present the findings of the 13th sampling event conducted at the Lockport City Landfill on October 29, 2009.

SECTION 2 - LONG TERM MONITORING

In accordance with the NYSDEC approved Long Term Monitoring Plan, and included in the Operation and Maintenance Plan, five (5) groundwater wells, and one (1) outfall were sampled by Stearns & Wheler, LLC on October 29, 2009. Of the six (6) sample monitoring points, a total of five (5) samples were collected. Monitoring Well MW-6D was not sampled, due to lack of available groundwater present at the time of sampling. The samples were delivered to Upstate Laboratories Inc. of Syracuse, New York, and analyzed for Target Compound List (TCL) volatile organic compounds (VOCs) by United States Environmental Protection Agency (USEPA) CLP Statement of Work (SOW) OLM04.2.

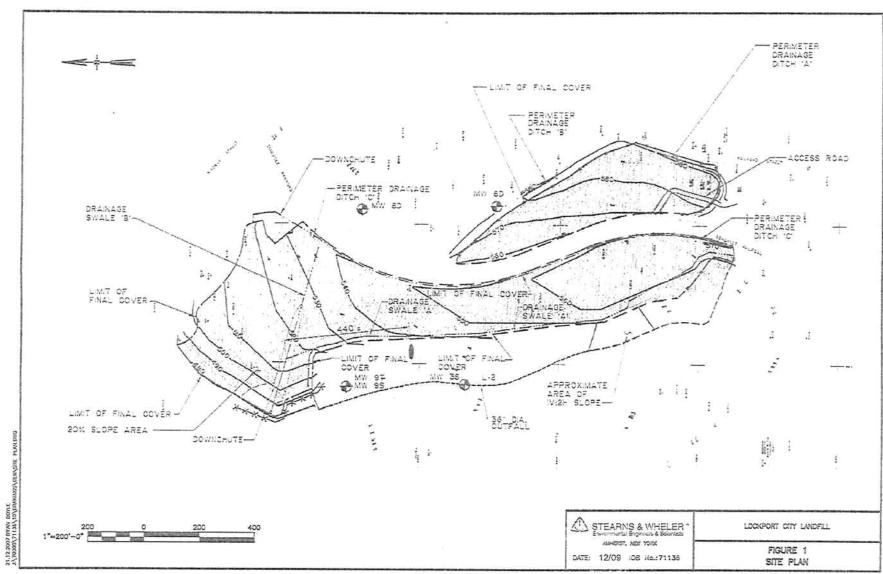
Analytical data sheets (i.e. laboratory report Form I VOA) are provided in Appendix A and Groundwater Field Sampling Records are presented in Appendix B. Table 1 summarizes analytical testing data from groundwater samples collected from monitoring wells and the outfall for past 13 years. Groundwater sampling and analytical testing is presented for the monitoring

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years of 1997 through 2009. The established action levels for monitoring wells MW-8D and MW-9I, and Outfall L2 are noted on Table 1.

Analytical results presented on Table 1 indicate that there were no exceedances detected above the reported action levels. Since exceedances did not occur, contingent sampling and analysis are not required. Therefore, the next sampling event will be scheduled for October 2010 representing year 14 of the Long Term Monitoring Program.

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TABLES



TABLE 1
Monitoring Well 3S
Groundwater Analytical Results
Lockport City Landfill

Volatile Compounds	Units	Action Level	Jun-97	Nov-97	Sep-98	Sep-99	Sep-00	Sep-01	Oct-02	Dec-03	Oct-04	Oct-95	Oct-06	Oct-07	Oct-08	Oct-09
Chloromethane	μg/L	NS	-				: i	- 1	-	-			-	U	U	U
Vinyl chloride	μg/L	NS	U	U	U	U	U	Ų	U	U	U	U	U	U	U	U
Bromomethane	μg/L	NS	-			-	-	-		-		-	-	U	U	U
Chloroethane	μg/L	NS	0.00	-			-			-	-		- 12	U	U	U
Acetone	μg/L	NS	U	U	U	U	U	U	U	U	U	U	6 J	U	U	U
1,1-Dichloroethene	µg/L	NS											-	U	U	U
Carbon disulfide	μg/L	NS	-									-	-	U	U	U
Methylene chloride	μg/L	NS		45		-			•	1.0		3		U	U	U
1,2-Dichloroethene (total)	µg/L	NS	U	U	U	U	U	U	U	U	U	U	Ū-	4 J	3J	2.J
trans-1, 2-Dichloroethene	µg/L	NS		-				-		-		-			•:	-
1,1-Dichloroethane	μg/L	NS	U	U	U	U	U	U	U	U	U	1 J	U	U	3J	2Ј
2-Butanone	µg/L	NS	120	(#)		T i		1		, i			- i	U	U	U
cis-1,2-Dichloroethene	μg/L	NS		-		-			S-2					-		
Chloroform	μg/L	NS		-	-					-			-	U	U	U
1,1,1-Trichloroethane	μg/L	NS	(e)	7/-		-			-					Ü	U	U
Carbon tetrachloride	μg/L	NS	140	-			-							U	Ü	U
Benzene	μg/L	NS			-		-						-	Ü	U	U
1,2-Dichloroethane	μg/L	NS					-		540	-				U	U	Ü
Trichloroethene	μg/L	NS	U	U	U	U	U	U	U	U	U	U	U	U	_ U	U
1,2-Dichloropropane	μg/L	NS	- 30				-	-					-	U	U	U
Bromodichloromethane	μg/L	NS	-	-		-		-	3#3				-	U	U	U
4-Methyl-2-pentanone	μg/L	NS		0.89		-	-	:4		-		2	2	U	U	U
cis-1,3-Dichloropropene	μg/L	NS	549	-	_ =	_ <u> </u>			1,27	-			- 3	U	U	U
Toluene	μg/L	NS					-	-	(#):	2. .		-		U	U	U
trans-1,3-Dichloropropene	μg/L	NS	1.00	-		*	-	14	(36)	:±:			-	U	U	U
1,1,2-Trichloroethane	μg/L	NS	\$#\\	(20)	-	¥	9	- 2	543		2		-	U	U	U
2-Hexanone	μg/L	NS	14	32					5	-				U	U	U
Tetrachloroethene	μg/L	NS					-							U	U	U
Dibromochloromethane	μg/L	NS	-				*		(9)	3	-	4	-	U	U	U
Chlorobenzene	μg/L	NS	(a)	220				- 4	747	1.2	-20			U	U	U
Ethylbenzene	μg/L	NS				-		-			1.0	-	-	U	U	U
m,p-Xylene	μg/L	NS	# # 53	3.		*	-						-	U	U	U
o-Xylene	μg/L	NS	(4)	1.27	045		-			-			9	U	U	U
Styrene	µg/L	NS	140	-	-							-		U	U	U
Bromoform	µg/L	NS		- S#3		-							-	U	U	U
1,1,2,2-Tetrachloroethane	µg/L	NS	-				-		-	-	741	-	-	U	U	U

Notes:

VOC analysis by USEPA CLP SOW OLM04.2

U = not detected above the quantitation limit

J = estimated concentration

NS = no standard

- = not sampled for

TABLE 1 (Cont'd) Monitoring Well 6D Groundwater Analytical Results Lockport City Landfill

Volatile Compounds	Units	Action Level	Jun-97	Nov-97	Sep-98	Sep-99	Sep-00	Sep-01	Oct-02	Dec-03	Oct-04	Oct-05	Oct-06	Oct-07	Oct-08	Oct-09
Chloromethane	μg/L	NS					-			-		-	-			
Vinyl chloride	µg/L	NS	U	U	U	U	U	U	U	U	U	U	U			
Bromomethane	μg/L	NS	-		1 2	-	1.4	-	-	28		12.1				
Chloroethane	µg/L	NS					-	-							•:	
Acetone	µg/L	NS	U	U	U	U	U	U	U	U	U	2 J	16			
1,1-Dichloroethene	µg/L	NS	2			-	:	2	14		2	140	- 4	-	- 12	
Carbon disulfide	μg/L	NS					100	-	-	i e i			-	-		
Methylene chloride	µg/L	NS				-				-		-				
1,2-Dichloroethene (total)	µg/L	NS	U	U	U	U	U	U	U	U	U	U	U		-	
trans-1, 2-Dichloroethene	μg/L	NS	-			-	-		-		-		7.00			
1,1-Dichloroethane	µg/L	NS	U	U	U	U	U	U	U	U	U	U	U			
2-Butanone	μg/L	NS	U	U	U	U	U	U	U	U	U	U	IJ			
cis-1,2-Dichloroethene	µg/L	NS	-		-		-					-			-	
Chloroform	μe/L	NS	-						-	2.63		-	-		-	- 2
1,1,1-Trichloroethane	μg/L	NS	-	120						3.5	2 .		-	-		
Carbon tetrachloride	με/Т.	NS		1.0												
Benzene	µg/L	NS	-		-					-		-	-		7.00	
1,2-Dichloroethane	μg/L	NS	2	-		-	-340								-	<u> </u>
Trichloroethene	μg/L	NS	U	U	U	U	U	U	U	U	U	U	U			
1,2-Dichloropropane	µg/L	NS	-	(- 0)		-		-		- 2		8-	94		22	
Bromodichloromethane	μg/L	NS				-										
4-Methyl-2-pentanone	μg/L	NS		38.			-			1.0		-				-
cis-1,3-Dichloropropene	μg/L	NS	-)#()			147			8-8		-	(a)		2.5	-
Toluene	μg/L	NS	U	U	U	U	U	U	U	U	U	2 J	2 J			
trans-1,3-Dichloropropene	μg/L	NS						-	-	-	*	-	-		A. 00	
1,1,2-Trichloroethane	µg/L	NS	-	140		-				1-1		-	-		949	2.43
2-Hexanone	µg/L	NS	<u>. </u>		- 2											
Tetrachloroethene	μg/L	NS		151	1.50	•	140	-				-			()	
Dibromochloromethane	μg/L	NS	-	***	S-2	-			-	3					94.	
Chlorobenzene	µg/L	NS		121		-	30	- 3	-	•		-				
Ethylbenzene	μg/L	NS	-	650	A#2	-			-	-	-	*			-	
Xylene (Total)	μg/L	NS	U	U	U	U	U	U	U	U	U	U	U	-	86	7/2
Styrene	μg/L	NS							-			-			:•:	1:51
Bromoform	μg/L	NS	-	-	-	-	-	- 60	-		-					*
1,1,2,2-Tetrachloroethane	µg/L	NS	-	:-	(i)		-	U#8	-	42			121	- E		7/27

Notes:

VOC analysis by USEPA CLP SOW OLM04,2 U = not detected above the quantitation limit

J = estimated concentration

- = not sampled

NS = no standard

Oct, 2007, Oct, 2008, & Oct, 2009: MW-6D not sampled due to dry conditions, no groundwater available

TABLE 1 (Cont'd) Monitoring Well 8D Groundwater Analytical Results Lockport City Landfill

Volatile Compounds	Units	Action Level	Jun-97	Nov-97	Sep-98	Sep-99	Sep-00	Sep-01	Oct-02	Dec-03	Oct-04	Oct-05	Oct-06	Oct-07	Oct-08	Oct-09
Chloromethane	μg/L	NS		× .		- 1	-		-	-	· ·	(16)		U	U	U
Vinyl chloride	µg/L	162	U	U	.U	U	U	7	33	6	4 J	U	U	U	U	U
Bromomethane	µg/L	NS	-		-	•					-			U	U	U
Chloroethane	µg/L	NS									3.00	18.		U	U	U
Acetone	µg/L	NS	-	(4)	-	-		-		-	348		- 4	U	U	U
1,1-Dichloroethene	µg/L	NS	- 4	7.0		·		2	-			1,5		U	U	U
Carbon disulfide	μg/L	NS	1.0		185	1,-1				351	375	(-)		U	U	U
Methylene chloride	μg/L	NS		-		-	-	-	-					U	U	U
1,2-Dichloroethene (total)	µg/L	1,580	100	90	110	18	25	41	120	7	28	27 J	40	32	34	26
trans-1, 2-Dichloroethene	µg/L	NS	-			-			-		-		·		-	-
I,I-Dichloroethane	μg/L	NS			-	V#1		-	-	-				U	U	U
2-Butanone	µg/L	NS			-	(S#)	*		- 4		120	247		U	U	U
cis-1,2-Dichloroethene	µg/L	NS	-	(\$1)				4		-		26		š	120	
Chloroform	μg/L	NS			-	1.0	-		-	-				U	U	U
1,1,1-Trichloroethane	μΩ/L	NS	-	-	745	(9 6)			-	190		((€:		U	U	U
Carbon tetrachloride	μg/L	NS	14	14		7/81		-			- 4	161		U	U.	U
Benzene	µg/L	NS	-					-	-					U	U	U
1,2-Dichloroethane	µg/L	NS		5-6		88	-			-	(2)	.€		U	U	U
Trichloroethene	μg/L	260	2	4	5	2	2	2	U	U	U	U	1 J	U	U	U
1,2-Dichloropropane	μg/L	NS		24/_	2	121		. <u>.</u>	-		- 4	- 0	-	U	U	U
Bromodichloromethane	µg/L	NS		-	583	.ne:					120	c*3		U	U	U
4-Methyl-2-pentanone	µg/L	NS			3.00						1.50	(*)		U	U	U
cis-1,3-Dichloropropene	µg/L	NS	-	-	: - :	%=;	- 20	*			f#8		-	U	U	U
Toluene	μg/L	NS			- 3	- 34				-	-			U	Ü	U
trans-1,3-Dichloropropene	μg/L	NS		.e.		S#3		-	-	- 2	578	9.50		U	U	U
1,1,2-Trichloroethane	µg/L	NS	*	:-		(X)	-2		-			3045		U	U	U
2-Нехалопе	μg/L	NS				850		2	-	-	342	•		U	U	U
Tetrachloroethene	μg/L	NS			-		-							U	U	U
Dibromochloromethane	µg/L	NS	*			/⊛:	•			-	976		1.00	U	U	U
Chlorobenzene	μg/L	NS					40			54			•	U	U	U
Ethylbenzene	μg/L	NS			- 22	Y <u>a.</u>				-	747	*		U	U	U
m,p-Xylene	μg/L	NS			<u></u>	0.00				- 2	892	8.00	ne:	U	U	U
o-Xylene	μg/L	NS.			340			*	-	14	0.00	· •	-	U	U	U
Styrene	μg/L	NS		9	343	826			12	===	148	28	a :	U	U	U
Bromoform	μg/L	NS		-	-	-						-		U	U	U
1,1,2,2-Tetrachloroethane	µg/L	NS					•					8.61	-	U	U	U

Notes:

VOC analysis by USEPA CLP SOW OLM04,2

U = not detected above the quantitation limit

J = estimated concentration

NS = no standard

TABLE 1 (Cont'd) Monitoring Well 9S Groundwater Analytical Results Lockport City Landfill

Volatile Compounds	Units	Action Level	Jun-97	Nov-97	Sep-98	Sep-99	Sep-00	Sep-01	Oct-02	Dec-03	Oct-04	Oct-05	Oct-96	Oct-97	80-12Q	Oct-09
Chloromethane	μg/L	NS	-			-	-			4.0	240			U	U	U
Vinyl chloride	μg/L	162	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Bromomethane	µg/L	NS			,: <u>*</u> :		-				/E	-:		U	U	U
Chloroethane	μg/L	NS			0.83		*	*		140	943	-	-	U	U	U
Acetone	μg/L	NS			1/2/				-		N24			U	U	U
1,1-Dichloroethene	μg/L	NS		-			-				(2 * 2			U	U	U
Carbon disulfide	μg/L	NS		850	3.63		-		· · ·) e			U	U	U
Methylene chloride	μg/L	NS	-	140	041		-		-	-	- 1		2	IJ	IJ	U
1,2-Dichloroethene (total)	μg/L	1,580	U	U	U	U	U	U.	U	U	U	U	U	U	U	U
trans-1, 2-Dichloroethene	μg/L	NS	25	4.50		i +2					-	#.C		-		
1,1-Dichloroethane	μg/L	NS		840	G#6	-	-:		54	147	*			U	U	U
2-Butanone	μg/L	NS	- 2	72.	021	==			-	140	- 4			U	U	U
cis-1,2-Dichloroethene	μg/L	NS		- 90	-			•	1.5	(50)		2.60			(5)	
Chloroform	μg/L	NS		1.50		•	*		-	-	3.6			U	U	U
1,1,1-Trichloroethane	μg/L	NS	-	(2.0	924				-	4	(a)	i iii		U	IJ	U
Carbon tetrachloride	μg/L	NS						-			-			U	U	U
Benzene	μg/L	NS		4.50						191	(-)			U	U	U
1,2-Dichloroethane	µg/L	NS		:#0	243	(-)	•		- 5-		5-2		- 4	U	U	U
Trichloroethene	μg/L	260	U	U	U	U	U	U	U	U	U	U	U	U	U	U
1,2-Dichloropropane	µg/L	NS		- 3		\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	-	-	-		- :•:		-	U	υ	U
Bromodichloromethane	μg/L	NS		-		(e)	*			· ·	5.0	⊕e:		U	U	U
4-Methyl-2-pentanone	μg/L	NS		380	-	3.45		* _	3	-	12	£ €	S	U	U	U
eis-1,3-Dichloropropene	μg/L	NS		121		- 12	_=	9				V#		U	U	U
Toluene	μg/L	NS	-			-		•		57.0	3.2		**	U	U	U
trans-1,3-Dichloropropene	μg/L	NS						*	*		•			U	U	U
I.1.2-Trichloroethane	μg/L	NS		- Feb. ()	-					-		85	- 20	U	U	U
2-Hexanone	µg/L	NS								-			-	U	U	U
Tetrachloroethene	μg/L	NS		1-11							30	160		U	U	U
Dibromochloromethane	µg/L	NS		100	3.00	-	*	*	*	(±2)	(10)	5943		U	U	U
Chlorobenzene	μg/L	NS	-	:4	(a)	i #	2		-		,46	-	4	U	U	U
Ethylbenzene	µg/L	NS						_ :		197	2 3 0	: * :		U	U	U
m,p-Xylene	μg/L	NS		287		((€)		× .	- 4		*:		*	U	U	U
o-Xylene	μg/L	NS			343	58			3	-	199	3¥3	•	U	U	U
Styrene	μg/L	NS						_ = _		-	•			U	U	U
Bromoform	μg/L	NS.			1.00	()		*	*			(#)		U	U	U
I,I,2,2-Tetrachloroethane	µg/L	NS			•							190		U	U	U

Notes:

VOC analysis by USEPA CLP SOW OLM04.2

U = not detected above the quantitation limit

J = estimated concentration

NS = no standard

- = not sampled for

TABLE 1 (Cont'd) Monitoring Well 9I Groundwater Analytical Results Lockport City Landfill

Volatile Compounds	Units	Action Level	Jun-97	Nov-97	Sep-98	Sep-99	Sep-00	Sep-01	Oct-02	Dec-03	Oct-04	Oct-05	Oct-06	Oct-07	Oct-08	Oct-09
Chloromethane	μg/L	NS			- 1		- 1		-	-	140		848	U	U	U
Vinyl chloride	μg/L	24	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Bromomethane	μg/L	NS			: 5	S#2		-	-				-	U	U	U
Chloroethane	μg/L	NS		*	:-	•	-		-	-	(4)	5-e:	0.20	U	U	U
Acetone	μg/L	NS	-	-	2	12:	-				721		224	U	U	U
1,1-Dichloroethene	μg/L	NS									1.	0.00		Ü	U	U
Carbon disulfide	<u>μο</u> /L	NS				•						-	-	U	U	U
Methylene chloride	цб/Г	NS			3 2	188		4 5	-	-	-	:#:s	-	U	U	U
1,2-Dichloroethene (total)	µg/L	42	8.4	6	6	5	4 J	4 J	4 J	4 J	3 J	3 J	2 J	3 J	2J	U
trans-1, 2-Dichloroethene	µg/L	NS					S-1				-	:	740	-	-	-
1,1-Dichloroethane	µg/L	NS		-		· •			-			-		U	U	U
2-Butanone	µg/L	NS	9		- 32	-	/ <u>6</u>	1	2 .	-	-	-		U	U	U
cis-1,2-Dichloroethene	це/L	NS				-	-		-		-		-			
Chloroform	μg/L	NS		-		-			-		-	-	-	U	U	U
1,1,1-Trichloroethane	μο/L	NS	-	-		(\$).			-	-	12	120	98	U	U	U
Carbon tetrachloride	μg/L	NS	_ s	-	-	- T-	7.5.		2			-		Ü	Ü	U
Велдене	µg/L	NS	-	-			(i.e.)	•:		-				U	U	U
1,2-Dichloroethane	μg/L	NS		*	-	(m)	o ⊕ 0		-	-		-		U	U	U
Trichloroethene	μg/L	NS	1.6	2	2	1 J	1 J	1 J	1 J	U	U	U	U	U	U	U
1,2-Dichloropropane	µg/L	NS	-			-	-	-						U	U	U
Bromodichloromethane	μg/L	NS			-			-		-				U	U	U
4-Methyl-2-pentanone	μg/L	NS			· ·	190	- 1883	N.E.			-			U	U	U
cis-1,3-Dichloropropene	μg/L	NS	8			- 1	141	724		-				U	U	Ü
Toluene	μg/L	NS			-									U	U	U
trans-1,3-Dichloropropene	μg/L	NS				(e)	-		•		-			U	U	Ü
1,1,2-Trichloroethane	µg/L	NS	*	-			742					12		IJ	U	U
2-Hexanone	μg/L	NS			-		2	04						U	U	U
Tetrachloroethene	μg/L	NS			:•	1.0			-	-	-	-		U	U	U
Dibromochloromethane	μg/L	NS		-	*		•	(-)			-	-	- 42	U	U	Ü
Chlorobenzene	μg/L	NS	¥:		2	-						1	27	U	U	U
Ethylbenzene	μg/L	NS						-		-	-			U	U	U
m,p-Xylene	μg/L	NS	51				-		*			-	(00)	U	U	U
o-Xylene	μg/L	NS	-		-		-		21	· ·			- 1	U	U	Ŭ
Styrene	μg/L	NS		9 _					\$				-	Ü	Ü	Ü
Bromoform	μg/L	NS					2.00				-		-	U	Ü	U
1,1,2,2-Tetrachloroethane	μg/L	NS			*		-			-				U	Ü	U

Notes:

VOC analysis by USEPA CLP SOW OLM04,2

U = not detected above the quantitation limit

J = estimated concentration

NS = no standard

- = not sampled for

trans-1,3-Dichloropropene

TABLE 1 (Cont'd) Outfall L-2 Groundwater Analytical Results Lockport City Landfill

Volatile Compounds	Units	Action Level	Jun-97	Nov-97	Sep-98	Sep-99	Sep-00	Sep-01	Oct-02	Dec-03	Oct-04	Oct-05	Oct-06	Oct-07	Oct-08	Oct-09
Chloromethane	µg/L	NS				-		-		- 54	(4)	7 4 3		U	U	U
Vinyl chloride	µg/L	94	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Bromomethane	μg/L	NS			5±5	*			-	-	200		-	U	U	U
Chloroethane	µg/L	NS			640	994	-				74.0		1.61	U	Ü	U .
Acetone	µg/L	NS	U	U	U	U	U	U	U	U	U	2 J	U	U	U	U
1,1-Dichloroethene	µg/L	NS		-	-			-	-			: #::		Ū	U	U
Carbon disulfide	µg/L	NS			28.0									U	U	U
Methylene chloride	µg/L	NS	-	4	141				2	-	;28	-		U	U	U
1,2-Dichloroethene (total)	µg/L	280	U	2	U	U	U	U	U	U	U	U	U	U	U	U
trans-1, 2-Dichloroethene	µg/L	NS			£.	7.0					(8)		-		300	-
1,1-Dichloroethane	µg/L	NS	- 3	:4	5 - 00	141	1.41		-	-	1-1	343	14.	U	U	U
2-Butanone	µg/L	NS	-			641.		-				-	12	U	U	U
cis-1,2-Dichloroethene	µg/L	NS				:±:	100			:-	5#C - 1	3.2			- 20	
Chloroform	μg/L	NS		-	1.00	2.5		-	*	18	-	•:		U	U	U
1,1,1-Trichloroethane	µg/L	NS	-	-	540	2		-	_	12	-		1.2	U	U	U
Carbon tetrachloride	µg/L	NS	<u> </u>		•	, •		-	-				-	U	U	U
Benzene	μg/L	NS		75	180		·-:	-				2.4	-	U	U	U
1,2-Dichloroethane	μg/L	NS		· ·	(##E)		(A)		-		79.5	3=3	- Sec	U	U	U
Trichloroethene	μg/L	NS	U	3	U	U	U	U	U	U	U	U	U	U	U	U
1,2-Dichloropropane	μg/L	NS									-	588		U	U	U
Bromodichloromethane	µg/L	NS		16	100			*				P#3	(100)	U	U	U
4-Methyl-2-pentanone	μg/L	NS	-	-	390		-	¥	*			3.	19 4 1	U	U	U
cis-1,3-Dichloropropene	μg/L	NS			-		- G							U	U	U
Toluene	μg/L	NS			E 150							983	37.	U	U	U
trans-1,3-Dichloropropene	μg/L	NS	*	*	*		(90)	•		*		(3€6	390	U	U	U
1,1,2-Trichloroethane	μg/L	NS		-	*			26		34		1949	Ser	U	U	U
2-Hexanone	μg/L	NS		-						- 3 -			-	U	U	U
Tetrachloroethene	μg/L	NS		:-			(: <u>*</u> :	**		*				U	U	U
Dibromochloromethane	µg/L	NS	-	-			(948	+		*		540	(/e/	U	U	U
Chlorobenzene	μg/L	NS	υ	U	U	U	U	U	U	U	U	U	U	U	U	U
Ethylbenzene	μg/L	NS	-		-									U	U	U
m,p-Xylene	μg/L	NS			(#)	3 - 8	0.60	*:		*	-	2.00	-	U	Ü	U
o-Xylene	μg/L	NS						-	<u> </u>		1-		24:	U	U	U
Styrene	μg/L	NS										-	-	U	U	U
Bromoform	μg/L	NS	*				7.9	-			-		(€)	U	U	U
1,1,2,2-Tetrachloroethane	μg/L	NS	-	×	200	46	V#8			-	-	947		U	U	U

Notes:

VOC analysis by USEPA CLP SOW OLM04.2

U = not detected above the quantitation limit

J = estimated concentration

NS = no standard

- = not sampled for

APPENDICES



APPENDIX A



SITE Loci	kport City Landfill	<u></u>	DATE	10/29/09
Sampler: Bria	n Doyle	_	SAMPLE ID	MW-3S
	Depth of well (from top of casing) Initial static water level (from top of ca		4 ft 3 ft	 _:
Evacuation Met	thod:		Well Volume	e Calculation
Submersible	Centrifugal	2in. casing:	9.94	ft. of water x .16 = 1.59 gallons
Airlift	Pos. Displ.	3in. casing:		ft. of water x .36 = gallons
Bailer	X >>> No. of bails	4in. casing:		ft. of water x .65 = gallons
Volume of w	vater removed 2.00 gals.			
	> 3 volumes: yes no			
	dry: yes no			
Field Tests:	Temp: pH Conductivity DO Turbidity Salinity	12.9 C 6.89 3.17 mS/cm 3.97 mg/l 241 NTUs 0.20 %		
Sampling:				Time: 1:15 PM
Sampling Method:	Stainless Steel Bailer Disposable Bailer X Disposable Pump Other			
Observations:				
Weat	ther/Temperature: Overcast, 50°			
Phys	ical Appearance and Odor of Sample:	No odor, reddish-br	rown color	
Comments:	Debris around monitoring well. Unable to fully purge well due to o Well pad is intact and the stickup p			d the screen.

SITE	Lockp	ort City Landfill		DATE	10/29/09	
Sampler:	Brian	Doyle		SAMPLE ID	MW-6D	
		Depth of well (from top of casing) Initial static water level (from top of casing)		ft	- -	
Evacuation	n Metho	od:		Well Volume	e Calculation	
Subm	ersible	Centrifugal	2in. casing:	0.42	ft. of water x .16 =	0.07 gallons
Airlift	ì	Pos. Displ.	3in. casing:		ft. of water $x . 36 =$	gallons
Bailer	r	X >>> No. of bails	4in. casing:		ft. of water x .65 = $\frac{1}{2}$	gallons
Volun	ne of wat	er removed 0.00 gals. > 3 volumes: yes no dry: yes no				
Field Test	s: .	Temp: pH Conductivity DO Turbidity Oxidation Reduction Potential(ORP) Salinity	mS/cm mg/l NTUs mV %			
Sampling:	:				Time:	AM
Sampling Me	ethod:	Stainless Steel Bailer Disposable Bailer Disposable Pump Other				
Observation	ons:					
	Weathe	er/Temperature: Overcast, 50°				
	Physica	al Appearance and Odor of Sample:				
Comments	s;	Unable to test for water quality parameter. Well pad is intact and the stickup protection.			glible amount of wa	ter in well.

SITE	Lockpo	ort City Landfi	11		_		DATE	10/29/09	
Sampler:	Brian I	Doyle					SAMPLE ID	MW-8D	
		Depth of well (Initial static wa	_			76.67		€ -	
Evacuatio	n Metho	d:					Well Volume	e Calculation	
Subm	nersible		Centrifugal)6	_	2in. casing:	5.07	ft. of water x .16 =	
Airlif	ft		Pos. Displ.		-	3in. casing:		ft. of water $x . 36 =$	gallons
Baile	r	<u>X</u> >>	>> No. of bails	<u> </u>		4in. casing:		ft. of water $x .65 =$	gallons
Volu	me of wate	r removed > 3 volumes: dry:	yes yes	gals. no no					
Field Test	ts: 、	Temp: pH Conductivity DO Turbidity Salinity			5.15				
Sampling:	:							Time: 11:00	AM
Sampling M	lethod:	Stainless Steel B Disposable Baile Disposable Pum Other	er	X					
Observati	ons:								
	Weathe	r/Temperature:	Overcast,	50°					
	Physica	l Appearance an	d Odor of Sam	ple:	No odo	or, slight yel	low color		
Comment	s:	Well purged Well pad is in			ective co	over is in go	od condition.		

SITE Lockp	ort City Landfill	DATE	10/29/09
Sampler: Brian	Doyle	SAMPLE ID	MW-9I
	Depth of well (from top of casing) Initial static water level (from top of casing)		
Evacuation Method	od:	Well Volum	e Calculation
Submersible	Centrifugal	2in. casing: 14.4	9 ft. of water x .16 = $\frac{2.32}{2.32}$ gallons
Airlift	Pos. Displ.	3in. casing:	ft. of water x .36 = gallons
Bailer	X >>> No. of bails	4in. casing:	ft. of water x .65 = gallons
Volume of wat	er removed 6.96 gals. > 3 volumes: yes no dry: yes no		
Field Tests: .	Temp: pH Conductivity DO Turbidity Salinity	13.2 C 6.96 1.69 mS/cm 3.84 mg/l 132 NTUs 0.1 %	
Sampling:			Time: 1:50 PM
Sampling Method:	Stainless Steel Bailer Disposable Bailer Disposable Pump Other		
Observations:			
Weathe	er/Temperature: Overcast, 50°		
Physica	al Appearance and Odor of Sample: Sli	ightly turbid, reddish brown, n	o odor.
Comments:	Well pad is intact and the stickup protective be changed.	ve cover is in good condition.	Lock has corosion and should

SITE	Lockport City Land	dfill		DATE	10/29/09	
Sampler:	Brian Doyle			SAMPLE ID	MW-9S;MS/MSD	
	Initial static	ell (from top of casing) water level (from top of		2.36 ft 6.5 ft	-	
Evacuation	Method:			Well Volum	e Calculation	
Subme	rsible	Centrifugal	2in. casi	ng: 5.86	$\frac{6}{2}$ ft. of water x .16 =	0.94 gallons
Airlift	-	Pos. Displ.	3in. casi	ng:	ft. of water x .36 =	gallons
Bailer	X	>>> No. of bails	4in. casi	ng:	ft. of water x .65 =	gallons
Volum	e of water removed > 3 volumes: dry:	2.81 gals. yes n yes n				
Field Tests	: Temp:	y	13.0 C 7.14 1.69 mS/cm 3.40 mg/l 634 NTUs 0.1 %	1		
Sampling:					Time: 2:15	PM
Sampling Met	thod: Stainless Stee Disposable Ba Disposable Pu Other	ailer >	<u>(</u>			
Observation	ns:					
	Weather/Temperature	e: Overcast, 50°				
	Physical Appearance	and Odor of Sample:	Very turbid, br	ownish color, no	odor.	
		-				
Comments	Well pad is	s intact and the stickup	protective cover is in	good condition.		

STEARNS & WHELER GHD INC. SURFACE WATER FIELD SAMPLING RECORD

SITE	Lockp	ort City Landfill	=======================================	DATE	10/29/09
Samplers:	Brian	Doyle	-	SAMPLE ID	Outfall L-2
Sampling	Method	:			
Subm Airlifi Bailei		GRAB Centrifugal Pos. Displ. >>> No. of bails	- - -		
Field Test	ts:	Temp: pH Conductivity DO Turbidity Salinity	12.7 C 7.29 1.58 mS/cm 8.42 mg/l 43.6 NTUs 0.1 %		
Sampling:	:				Time: 1:00 PM
Sampling Mo	ethod:	Stainless Steel Bailer Teflon Bailer Disposable Pump Other Grab	- <u>-</u> -		
Observation	ons:				
	Weathe	r/Temperature: Overcast, 50°			
	Physica	al Appearance and Odor of Sample:	No odor, light brov	vn color, slight	tly turbid.
Comment	s:	Iron bacteria was present on outfall an	d rocks.		

APPENDIX B



Shipping: 6034 Corporate Dr. * E. Syracuse, NY 13057-1017 * (315) 437-0255 * Fax (315) 437-1209 Mailing: Box 169 * Syracuse, NY 13206

Albany (518) 459-3134 * Binghamton (607) 724-0478 * Buffalo (716) 972-0371 Rochester (866) 437-0255 * New Jersey (908) 581-4285

Mr. David Rowlinson Stearns & Wheler GHD 415 N. French Rd. Amherst, NY 14228

November 16, 2009

RE: Analytical Report:

Lockport City Landfill

Order No.: U0911016

Dear Mr. Rowlinson:

Upstate Laboratories, Inc. received 7 samples on 10/30/09 for the analyses presented in the following report.

All analytical results relate to the samples as received by the laboratory.

All analytical data conforms with standard approved methodologies and quality control. Our quality control narrative will be included should any anomalies occur.

We have included the Chain of Custody Record as part of your report. You may need to reference this form for a more detailed explanation of your samples. Samples will be disposed of approximately one month from final report date.

Should you have any questions, please feel free to give us a call.

Thank you for your patronage.

Sincerely,

UPSTATE LABORATORIES, INC.

Anthony / Scala

President/CEO

Enclosures: ASP-A Narrative, report, invoice

Confidentiality Statement: This report is meant for the use of the intended recipient. It may contain confidential information, which is legally privileged or otherwise protected by law. If you have received this report in error, you are strictly prohibited from reviewing, using, disseminating, distributing or copying the information.

Shipping: 6034 Corporate Dr. * E. Syracuse, NY 13057-1017 * (315) 437-0255 * Fax (315) 437-1209

Mailing: Box 169 * Syracuse, NY 13206

Albany (518) 459-3134 * Binghamton (607) 724-0478 * Buffalo (716) 972-0371

Rochester (866) 437-0255 * New Jersey (908) 581-4285

Mr. David Rowlinson Stearns & Wheler GHD 415 N. French Rd. Amherst, NY 14228

November 18, 2009

RE:

Lockport City Landfill

Samples Collected October 29, 2009

Case Narrative for ULI Laboratory SDG SW 18; ULI Workorder U0911016

Dear Mr. Rowlinson:

The following is a New York State Department of Environmental Conservation Analytical Services Protocol (NYSDEC ASP) Category A case narrative for the above referenced project. The test results were subject to an internal validation as described below:

Internal Validation

For each test, the chemist sorted the water samples into batches of twenty samples or less and added quality control (QC) samples. The batches were analyzed by USEPA and NYSDEC approved test procedures (Table 1). During the course of the analyses the chemist compared the quality control test results to performance criteria and (if necessary) took corrective actions. At the end of the analysis, the data was assembled into data packages and submitted to the section supervisor for review and approval. On the cover of each data package the analyst described any anomaly that may have occurred and, if it did occur, why the data was still found acceptable. A summary of the comments on the cover sheet of each test from each laboratory follows:

Trace Metals

<u>Test</u>	Batch	Anomaly
8260 TCL	R46903	The CCV recovery for 1,1,2,2-Tetrachloroethane was above QC acceptance limits. All other criteria were satisfied.
	R46904	Criteria were satisfied.

Should questions arise please do not hesitate to call the Environmental Project Coordinator (EPC) assigned to your job or myself.

The total number of pages in this data package is:

NY Lab ID 10170 NJ Lab ID NY750 PA Lab ID 68-01096 Mr. David Rowlinson November 18, 2009 Page 2

I certify that this data package is in compliance with the terms and conditions of the Contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and/or in the computer-readable data submitted on floppy diskette has been authorized by the Laboratory Manager or his designee, as verified by the following signature.

Sincerely,

UPSTATE LABORATORIES, INC.

Anthony J. Soala
Director

File: SW18A

Table 1 Methodology

The analyses were performed using test methods developed by the USEPA and reorganized by the NYSDEC in the Analytical Services Protocol (ASP). The specific method numbers are:

Parameter	Method	Reference
Volatiles TCL	8260	(1)

(1) New York State Department of Environmental Conservation Analytical Services Protocol (NYSDEC ASP), 7/05 Revision

Analytical Report

CLIENT:

Stearns & Wheler GHD

Lab Order;

U0911016

Project:

Lockport City Landfill

Lab ID:

U0911016-001

Date: 16-Nov-09

Client Sample ID: MW-8D

Collection Date: 10/29/2009 11:00:00 AM

Matrix: AQUEOUS

Analyses	Result	Limit Qu	ual Units	DF	Date Analyzed
ASP/CLP TCL VOLATILE WATER		8260	ASP_TCL_W		Analyst: LEF
Chloromethane	ND	5.0	μg/L	1	11/8/2009 6:03:00 PM
Vinyl chloride	ND	5.0	μg/L	1	11/8/2009 6:03:00 PM
Bromomethane	ND	5.0	μg/L	1	11/8/2009 6:03:00 PM
Chloroethane	ND	5.0	μg/L	1	11/8/2009 6:03:00 PM
Acetone	ND	10	μg/L	1	11/8/2009 6:03:00 PM
1,1-Dichloroethene	ND	5.0	μg/L	1	11/8/2009 6:03:00 PM
Carbon disulfide	ND	5.0	μg/L	1	11/8/2009 6:03:00 PM
Methylene chloride	ND	5.0	μg/L	1	11/8/2009 6:03:00 PM
trans-1,2-Dichloroethene	ND	5,0	μg/L	1	11/8/2009 6:03:00 PM
1,1-Dichloroethane	ND	5.0	μg/L	1	11/8/2009 6:03:00 PM
2-Butanone	ND	10	μg/L	1	11/8/2009 6:03:00 PM
cis-1,2-Dichloroethene	26	5.0	μg/L	1	11/8/2009 6:03:00 PM
Chloroform	ND	5.0	μg/L	1	11/8/2009 6:03:00 PM
1,1,1-Trichloroethane	ND	5.0	μg/L	1	11/8/2009 6:03:00 PM
Carbon tetrachloride	ND	5.0	µg/L	1	11/8/2009 6:03:00 PM
Benzene	ND	5.0	µg/L	1	11/8/2009 6:03:00 PM
1,2-Dichloroethane	ND	5.0	μg/L	1	11/8/2009 6:03:00 PM
Trichloroethene	ND	5.0	μg/L	1	11/8/2009 6:03:00 PM
1,2-Dichloropropane	ND	5.0	μg/L	1	11/8/2009 6:03:00 PM
Bromodichloromethane	ND	5.0	μg/L	1	11/8/2009 6:03:00 PM
4-Methyl-2-pentanone	ND	10	μg/L	1	11/8/2009 6:03:00 PM
cis-1,3-Dichloropropene	ND	5.0	μg/L	1	11/8/2009 6:03:00 PM
Toluene	ND	5.0	μg/L	1	11/8/2009 6:03:00 PM
trans-1,3-Dichloropropene	ND	5.0	μg/L	1	11/8/2009 6:03:00 PM
1,1,2-Trichloroethane	ND	5.0	μg/L	1	11/8/2009 6:03:00 PM
2-Hexanone	ND	10	μg/L	1	11/8/2009 6:03:00 PM
Tetrachloroethene	ND	5.0	μg/L	1	11/8/2009 6:03:00 PM
Dibromochloromethane	ND	5.0	μg/L	1	11/8/2009 6:03:00 PM
Chlorobenzene	ND	5.0	μg/L	1	11/8/2009 6;03:00 PM
Ethylbenzene	ND	5.0	μg/L	1	11/8/2009 6:03:00 PM
m,p-Xylene	ND	5.0	μg/L	1	11/8/2009 6:03:00 PM
o-Xylene	ND	5.0	μg/L	1	11/8/2009 6:03:00 PM
Styrene	ND	5.0	μg/L	1	11/8/2009 6:03:00 PM
Bromoform	ND	5.0	μg/L	1	11/8/2009 6:03:00 PM
1,1,2,2-Tetrachloroethane NOTES:	ND	5.0	μg/L	1	11/8/2009 6:03:00 PM

TICS: No compounds were detected.

Approved By:

Qualifiers:

- Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit

Date: 11-16-09 Page 1 of 7

- Value exceeds Maximum Contaminant Value
- Value above quantitation range
- Analyte detected below quantitation limits
- Spike Recovery outside accepted recovery limits

Analytical Report

CLIENT:

Stearns & Wheler GHD

Lab Order:

U0911016

Project:

Lockport City Landfill

Lab ID:

U0911016-002

Date: 16-Nov-09

Client Sample ID: MW-9S

Collection Date: 10/29/2009 2:15:00 PM

Matrix: AQUEOUS

Analyses	Result	Limit Q	ual Units	DF	Date Analyzed
ASP/CLP TCL VOLATILE WATER		8260	ASP_TCL_W		Analyst: LEF
Chloromethane	ND	5.0	μg/L	1	11/8/2009 6:40:00 PM
Vinyl chloride	ND	5.0	μg/L	1	11/8/2009 6:40:00 PM
Bromomethane	ND	5.0	μg/L	1	11/8/2009 6:40:00 PM
Chloroethane	ND	5.0	μg/L	1	11/8/2009 6:40:00 PM
Acetone	ND	10	μg/L	1	11/8/2009 6:40:00 PM
1,1-Dichloroethene	ND	5.0	μg/L	1	11/8/2009 6:40:00 PM
Carbon disulfide	ND	5.0	μg/L	1	11/8/2009 6:40:00 PM
Methylene chloride	ND	5.0	μg/L	1	11/8/2009 6;40:00 PM
trans-1,2-Dichloroethene	ND	5.0	μg/L	1	11/8/2009 6:40:00 PM
1,1-Dichloroethane	ND	5.0	µg/L	1	11/8/2009 6;40:00 PM
2-Butanone	ND	10	μg/L	1	11/8/2009 6:40:00 PM
cis-1,2-Dichloroethene	ND	5.0	μg/L	1	11/8/2009 6:40:00 PM
Chloroform	ND	5.0	μg/L	1	11/8/2009 6:40:00 PM
1,1,1-Trichloroethane	ND	5.0	μg/L	1	11/8/2009 6:40:00 PM
Carbon tetrachloride	ND	5.0	μg/L	1	11/8/2009 6:40:00 PM
Benzene	ND	5.0	µg/L	1	11/8/2009 6:40:00 PM
1,2-Dichloroethane	ND	5.0	µg/L	1	11/8/2009 6:40:00 PM
Trichloroethene	ND	5.0	μg/L	1	11/8/2009 6:40:00 PM
1,2-Dichloropropane	ND	5.0	μg/L	1	11/8/2009 6:40:00 PM
Bromodichloromethane	ND	5.0	μg/L	1	11/8/2009 6:40:00 PM
4-Methyl-2-pentanone	ND	10	μg/L	1	11/8/2009 6:40:00 PM
cis-1,3-Dichloropropene	ND	5.0	μg/L	1	11/8/2009 6:40:00 PM
Toluene	ND	5.0	μg/L	1	11/8/2009 6:40:00 PM
trans-1,3-Dichloropropene	ND	5.0	μg/L	1	11/8/2009 6:40:00 PM
1,1,2-Trichloroethane	ND	5.0	μg/L	1	11/8/2009 6:40:00 PM
2-Hexanone	ND	10	µg/L	1	11/8/2009 6:40:00 PM
Tetrachloroethene	ND	5.0	μg/L	1	11/8/2009 6:40:00 PM
Dibromochloromethane	ND	5.0	μg/L	1	11/8/2009 6:40:00 PM
Chlorobenzene	ND	5.0	µg/L	1	11/8/2009 6:40:00 PM
Ethylbenzene	ND	5.0	μg/L	1	11/8/2009 6:40:00 PM
m,p-Xylene	ND	5.0	μg/L	1	11/8/2009 6:40:00 PM
o-Xylene	ND	5.0	μg/L	1	11/8/2009 6;40;00 PM
Styrene	ND	5.0	μg/L	1	11/8/2009 6:40:00 PM
Bromoform	ND	5.0	μg/L	1	11/8/2009 6:40:00 PM
1,1,2,2-Tetrachloroethane NOTES:	ND	5.0	μg/L	1	11/8/2009 6:40:00 PM

TICS: No compounds were detected,

Approved By: PH

Qualifiers:

- Analyte detected in the associated Method Blank
- Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit

Date: 11-16-09 Page 2 of 7

- Value exceeds Maximum Contaminant Value
- Value above quantitation range
- J Analyte detected below quantitation limits
- Spike Recovery outside accepted recovery limits

Analytical Report

CLIENT:

Stearns & Wheler GHD

Lab Order:

U0911016

Project:

Lockport City Landfill

Lab ID:

U0911016-003

Date: 16-Nov-09

Client Sample ID: MW-9I

Collection Date: 10/29/2009 1:50:00 PM

Matrix: AQUEOUS

Analyses	Result	Limit Qu	al Units	DF	Date Analyzed
ASP/CLP TCL VOLATILE WATER		8260	ASP_TCL_W		Analyst: LEF
Chloromethane	ND	5.0	µg/L.	1	11/8/2009 8:36:00 PM
Vinyl chloride	ND	5.0	μg/L	1	11/8/2009 8:36:00 PM
Bromomethane	ND	5.0	μg/L	1	11/8/2009 8:36:00 PM
Chloroethane	ND	5.0	μg/L	1	11/8/2009 8:36:00 PM
Acetone	ND	10	μg/L	1	11/8/2009 8:36:00 PM
1,1-Dichloroethene	ND	5.0	μg/L	1	11/8/2009 8:36;00 PM
Carbon disulfide	ND	5.0	μg/L	1	11/8/2009 8:36:00 PM
Methylene chloride	ND	5.0	μg/L	1	11/8/2009 8:36:00 PM
trans-1,2-Dichloroethene	ND	5.0	µg/L	1	11/8/2009 8:36:00 PM
1,1-Dichloroethane	ND	5,0	μg/L	1	11/8/2009 8:36:00 PM
2-Butanone	ND	10	µg/L	1	11/8/2009 8:36:00 PM
cis-1,2-Dichloroethene	ND	5.0	μg/L	1	11/8/2009 8:36:00 PM
Chloroform	ND	5.0	μg/L	1	11/8/2009 8:36:00 PM
1,1,1-Trichloroethane	ND	5.0	μg/L	1	11/8/2009 8:36:00 PM
Carbon tetrachloride	ND	5.0	μg/L	1	11/8/2009 8:36:00 PM
Benzene	ND	5.0	µg/L	1	11/8/2009 8:36:00 PM
1,2-Dichloroethane	ND	5.0	μg/L	1	11/8/2009 8:36:00 PM
Trichloroethene	ND	5.0	μg/L	1	11/8/2009 8:36:00 PM
1,2-Dichloropropane	ND	5.0	μg/L	1	11/8/2009 8:36:00 PM
Bromodichloromethane	ND	5.0	μg/L	1	11/8/2009 8:36:00 PM
4-Methyl-2-pentanone	ND	10	μg/L	1	11/8/2009 8:36:00 PM
cis-1,3-Dichloropropene	ND	5.0	μg/L	1	11/8/2009 8:36:00 PM
Toluene	ND	5.0	μg/L	1	11/8/2009 8:36:00 PM
trans-1,3-Dichloropropene	ND	5.0	μg/L	1	11/8/2009 8:36:00 PM
1,1,2-Trichloroethane	ND	5.0	μg/L	1	11/8/2009 8:36:00 PM
2-Hexanone	ND	10	μg/L	1	11/8/2009 8:36:00 PM
Tetrachloroethene	ND	5.0	μg/L	1	11/8/2009 8:36:00 PM
Dibromochloromethane	ND	5.0	μg/L	1	11/8/2009 8:36:00 PM
Chlorobenzene	ND	5.0	μg/L	1	11/8/2009 8:36:00 PM
Ethylbenzene	ND	5.0	μg/L	1	11/8/2009 8:36:00 PM
m,p-Xylene	ND	5.0	μg/L	1	11/8/2009 8:36:00 PM
o-Xylene	ND	5.0	μg/L	1	11/8/2009 8:36:00 PM
Styrene	ND	5.0	µg/L	1	11/8/2009 8:36:00 PM
Bromoform	ND	5.0	µg/L	1	11/8/2009 8:36:00 PM
1,1,2,2-Tetrachloroethane NOTES:	ND	5.0	μg/L	1	11/8/2009 8:36:00 PM

TICS: No compounds were detected.

Approved By: DH

- Analyte detected in the associated Method Blank
- Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit

Date: 11-16-09 Page 3 of 7

- Value exceeds Maximum Contaminant Value
- E Value above quantitation range
- Analyte detected below quantitation limits
- Spike Recovery outside accepted recovery limits

Analytical Report

CLIENT:

Stearns & Wheler GHD

Lab Order:

U0911016

Project:

Lockport City Landfill

Lab ID:

U0911016-004

Date: 16-Nov-09

Client Sample ID: MW-3S

Collection Date: 10/29/2009 1:15:00 PM

Matrix: AQUEOUS

Analyses	Result	Limit Q	ual Units	DF	Date Analyzed
ASP/CLP TCL VOLATILE WATER		826	DASP_TCL_W		Analyst: LEF
Chloromethane	ND	5,0	μg/L	1	11/8/2009 11:48:00 PM
Vinyl chloride	ND	5.0	μg/L	1	11/8/2009 11:48:00 PM
Bromomethane	ND	5.0	µg/L	1	11/8/2009 11:48:00 PM
Chloroethane	ND	5.0	μg/L	1	11/8/2009 11:48:00 PM
Acetone	ND	10	μg/L	1	11/8/2009 11:48:00 PM
1,1-Dichloroethene	ND	5.0	μg/L	1	11/8/2009 11:48:00 PM
Carbon disulfide	ND	5.0	μg/L	1	11/8/2009 11:48:00 PM
Methylene chloride	ND	5.0	μg/L	1	11/8/2009 11:48:00 PM
trans-1,2-Dichloroethene	ND	5.0	μg/L	1	11/8/2009 11:48:00 PM
1,1-Dichloroethane	2	5.0	J μg/L	1	11/8/2009 11:48:00 PM
2-Butanone	ND	10	μg/L	1	11/8/2009 11:48:00 PM
cis-1,2-Dichloroethene	2	5.0	J μg/L	1	11/8/2009 11:48:00 PM
Chloroform	ND	5.0	μg/L	1	11/8/2009 11:48:00 PM
1,1,1-Trichloroethane	ND	5.0	μg/L	1	11/8/2009 11:48:00 PM
Carbon tetrachloride	ND	5.0	μg/L	1	11/8/2009 11:48:00 PM
Benzene	ND	5.0	μg/Ļ	1	11/8/2009 11:48:00 PM
1,2-Dichloroethane	ND	5.0	μg/L	1	11/8/2009 11:48:00 PM
Trichloroethene	ND	5.0	µg/L	1	11/8/2009 11:48:00 PM
1,2-Dichloropropane	ND	5.0	μg/L	1	11/8/2009 11:48:00 PM
Bromodichloromethane	ND	5.0	μg/L	1	11/8/2009 11:48:00 PM
4-Methyl-2-pentanone	ND	10	μg/L	1	11/8/2009 11:48:00 PM
cis-1,3-Dichloropropene	ND	5.0	μg/L	1	11/8/2009 11:48:00 PM
Toluene	ND	5.0	μg/L	1	11/8/2009 11:48:00 PM
trans-1,3-Dichloropropene	ND	5.0	µg/L	1	11/8/2009 11:48:00 PM
1,1,2-Trichloroethane	ND	5.0	μg/L	1	11/8/2009 11:48:00 PM
2-Hexanone	ND	10	µg/L	1	11/8/2009 11:48:00 PM
Tetrachloroethene	ND	5.0	µg/L	1	11/8/2009 11:48:00 PM
Dibromochloromethane	ND	5.0	µg/L	1	11/8/2009 11:48:00 PM
Chlorobenzene	ND	5.0	μg/L	1	11/8/2009 11:48:00 PM
Ethylbenzene	ND	5.0	μg/L	1	11/8/2009 11:48:00 PM
m,p-Xylene	ND	5.0	μg/L	1	11/8/2009 11:48:00 PM
o-Xylene	ND	5.0	µg/L	1	11/8/2009 11:48:00 PM
Styrene	ND	5.0	µg/L	1	11/8/2009 11:48:00 PM
Bromoform	ND	5.0	µg/L	1	11/8/2009 11:48:00 PM
1,1,2,2-Tetrachloroethane	ND	5.0	µg/L	1	11/8/2009 11:48:00 PM

NOTES:

TICS: No compounds were detected.

Approved By:

Qualifiers:

- Analyte detected in the associated Method Blank
- Holding times for preparation or analysis exceeded Н
- ND Not Detected at the Reporting Limit

Date: 11-16-09 Page 4 of 7

- Value exceeds Maximum Contaminant Value
- Value above quantitation range
- J Analyte detected below quantitation limits
- Spike Recovery outside accepted recovery limits

Analytical Report

CLIENT:

Stearns & Wheler GHD

Lab Order:

U0911016

Project:

Lockport City Landfill

Lab ID:

U0911016-005

Date: 16-Nov-09

Client Sample ID: Outfall L-2

Collection Date: 10/29/2009 1:00:00 PM

Matrix: AQUEOUS

Analyses	Result	Limit Q	ial Units	DF	Date Analyzed
ASP/CLP TCL VOLATILE WATER		8260	ASP_TCL_W		Analyst: LEF
Chloromethane	ND	5.0	µg/L	1	11/9/2009 12:27:00 AM
Vinyl chloride	ND	5,0	μg/L	1	11/9/2009 12:27:00 AM
Bromomethane	ND	5.0	μg/L	1	11/9/2009 12:27:00 AM
Chloroethane	ND	5.0	μg/L	1	11/9/2009 12:27:00 AM
Acetone	ND	10	μg/L	1	11/9/2009 12:27:00 AM
1,1-Dichloroethene	ND	5,0	μg/L	1	11/9/2009 12:27:00 AM
Carbon disulfide	ND	5.0	μg/L	1	11/9/2009 12:27:00 AM
Methylene chloride	ND	5.0	μg/L	1	11/9/2009 12:27:00 AM
trans-1,2-Dichloroethene	ND	5.0	μg/L	1	11/9/2009 12:27:00 AM
1,1-Dichloroethane	ND	5.0	μg/L	1	11/9/2009 12:27:00 AM
2-Butanone	ND	10	μg/L	1	11/9/2009 12:27:00 AM
cis-1,2-Dichloroethene	ND	5,0	μg/L	1	11/9/2009 12:27:00 AM
Chloroform	ND	5.0	μg/L	1	11/9/2009 12:27:00 AM
1,1,1-Trichloroethane	ND	5.0	μg/L	1	11/9/2009 12:27:00 AM
Carbon tetrachloride	ND	5.0	μg/L	1	11/9/2009 12:27:00 AM
Benzene	ND	5.0	µg/L	1	11/9/2009 12:27:00 AM
1,2-Dichloroethane	ND	5.0	μg/L	1	11/9/2009 12:27:00 AM
Trichloroethene	ND	5.0	μg/L	1	11/9/2009 12:27:00 AM
1,2-Dichloropropane	ND	5.0	μg/L	1	11/9/2009 12:27:00 AM
Bromodichloromethane	ND	5.0	μg/L	1	11/9/2009 12:27:00 AM
4-Methyl-2-pentanone	ND	10	μg/L	1	11/9/2009 12:27:00 AM
cis-1,3-Dichloropropene	ND	5.0	μg/L	1	11/9/2009 12:27:00 AM
Toluene	ND	5.0	μg/L	1	11/9/2009 12:27:00 AM
trans-1,3-Dichloropropene	ND	5.0	µg/L	1	11/9/2009 12:27:00 AM
1,1,2-Trìchloroethane	ND	5.0	µg/L	1	11/9/2009 12:27:00 AM
2-Hexanone	ND	10	μg/L	1	11/9/2009 12:27:00 AM
Tetrachloroethene	ND	5.0	μg/L	1	11/9/2009 12:27:00 AM
Dibromochloromethane	ND	5.0	μg/L	1	11/9/2009 12:27:00 AM
Chlorobenzene	ND	5.0	μg/L	1	11/9/2009 12:27:00 AM
Ethylbenzene	ND	5.0	μg/L	1	11/9/2009 12:27:00 AM
m,p-Xylene	ND	5,0	μg/L	1	11/9/2009 12:27:00 AM
o-Xylene	ND	5.0	μg/L	1	11/9/2009 12:27:00 AM
Styrene	ND	5.0	µg/L	1	11/9/2009 12:27:00 AM
Bromoform	ND	5.0	µg/L	1	11/9/2009 12:27:00 AM
1,1,2,2-Tetrachloroethane	ND	5.0	µg/L	1	11/9/2009 12:27:00 AM
NOTES:					

NOTES:

TICS: No compounds were detected.

Approved By: PH

Qualifiers:

- Analyte detected in the associated Method Blank
- Holding times for preparation or analysis exceeded Н
- ND Not Detected at the Reporting Limit

Date: 11-16-09

Page 5 of 7

- Value exceeds Maximum Contaminant Value
- Value above quantitation range
- J Analyte detected below quantitation limits
- Spike Recovery outside accepted recovery limits

Analytical Report

CLIENT:

Stearns & Wheler GHD

Lab Order:

U0911016

Project:

Lockport City Landfill

Lab ID:

U0911016-006

Date: 16-Nov-09

Client Sample ID: Trip Blank

Collection Date: 10/29/2009

Matrix: WATER

Analyses	Result	Limit Q	ual Units	DF	Date Analyzed
ASP/CLP TCL VOLATILE WATER	8260ASP_TCL_W				Analyst: LEI
Chloromethane	ND	5.0	µg/L	1	11/9/2009 1:05:00 AM
Vinyl chloride	ND	5.0	μg/L	1	11/9/2009 1:05:00 AM
Bromomethane	ND	5.0	µg/L	1	11/9/2009 1:05:00 AM
Chloroethane	ND	5.0	μg/L	1	11/9/2009 1:05:00 AM
Acetone	ND	10	μg/L	1	11/9/2009 1:05:00 AM
1,1-Dichloroethene	ND	5.0	μg/L	1	11/9/2009 1:05:00 AM
Carbon disulfide	ND	5.0	μg/L	1	11/9/2009 1:05:00 AM
Methylene chloride	ND	5.0	μg/L	1	11/9/2009 1:05:00 AM
trans-1,2-Dichloroethene	ND	5.0	μg/L	1	11/9/2009 1:05:00 AM
1,1-Dichloroethane	ND	5,0	μg/L	1	11/9/2009 1:05:00 AM
2-Butanone	ND	10	μg/L	1	11/9/2009 1:05:00 AM
cis-1,2-Dichloroethene	ND	5.0	μg/L	1	11/9/2009 1:05:00 AM
Chloroform	ND	5.0	μg/L	1	11/9/2009 1:05:00 AM
1,1,1-Trichloroethane	ND	5.0	μg/L	1	11/9/2009 1:05:00 AM
Carbon tetrachloride	ND	5.0	μg/L	1	11/9/2009 1:05:00 AM
Benzene	ND	5.0	μg/L	1	11/9/2009 1:05:00 AM
1,2-Dichloroethane	ND	5.0	μg/L	1	11/9/2009 1:05:00 AM
Trichloroethene	ND	5.0	μg/L	1	11/9/2009 1:05:00 AM
1,2-Dichloropropane	ND	5.0	μg/L	1	11/9/2009 1:05:00 AM
Bromodichloromethane	ND	5.0	μg/L	1	11/9/2009 1;05:00 AM
4-Methyl-2-pentanone	ND	10	µg/L	1	11/9/2009 1:05:00 AM
cis-1,3-Dichloropropene	ND	5.0	µg/L	1	11/9/2009 1:05:00 AM
Toluene	ND	5.0	µg/L	1	11/9/2009 1:05:00 AM
trans-1,3-Dichloropropene	ND	5.0	μg/L	1	11/9/2009 1:05:00 AM
1,1,2-Trichloroethane	ND	5.0	μg/L	1	11/9/2009 1:05:00 AM
2-Hexanone	ND	10	µg/L	1	11/9/2009 1:05:00 AM
Tetrachloroethene	ND	5.0	μg/L	1	11/9/2009 1:05:00 AM
Dibromochloromethane	ND	5.0	μg/L	1	11/9/2009 1:05:00 AM
Chlorobenzene	ND	5.0	μg/L	1	11/9/2009 1:05:00 AM
Ethylbenzene	ND	5.0	μg/L	1	11/9/2009 1:05:00 AM
m,p-Xylene	ND	5.0	μg/L	1	11/9/2009 1:05:00 AM
o-Xylene	ND	5.0	μg/L	1	11/9/2009 1:05:00 AM
Styrene	ND	5.0	μg/L	1	11/9/2009 1:05:00 AM
Bromoform	ND	5.0	μg/L	1	11/9/2009 1:05:00 AM
1,1,2,2-Tetrachloroethane NOTES:	ND	5.0	μg/L	1	11/9/2009 1:05:00 AM

NOTES:

TICS: No compounds were detected.

Approved By: P/-/

Qualifiers:

- Low Leve
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit

Date: //-/6-09

Page 6 of 7

- ** Value exceeds Maximum Contaminant Value
- E Value above quantitation range
- J Analyte detected below quantitation limits
- S Spike Recovery outside accepted recovery limits

Analytical Report

CLIENT:

Stearns & Wheler GHD

Lab Order:

U0911016

Project:

Lockport City Landfill

Lab ID:

U0911016-007

Date: 16-Nov-09

Client Sample ID: Holding Blank

Collection Date: 11/2/2009 12:00:00 PM

Matrix: WATER

Analyses	Result	Limit Qu	al Units	DF	Date Analyzed
ASP/CLP TCL VOLATILE WATER		8260	ASP_TCL_W		Analyst: LEI
Chloromethane	ND	5.0	μg/L	1	11/9/2009 1;43:00 AM
Vinyl chloride	ND	5.0	μg/L	1	11/9/2009 1:43:00 AM
Bromomethane	ND	5.0	μg/L	1	11/9/2009 1:43:00 AM
Chloroethane	ND	5.0	μg/L	1	11/9/2009 1:43:00 AM
Acetone	ND	10	µg/L	1	11/9/2009 1:43:00 AM
1,1-Dichloroethene	ND	5.0	μg/L	1	11/9/2009 1:43:00 AM
Carbon disulfide	ND	5.0	µg/L	1	11/9/2009 1:43:00 AM
Methylene chloride	ND	5.0	µg/L	1	11/9/2009 1:43:00 AM
trans-1,2-Dichloroethene	ND	5.0	μg/L	1	11/9/2009 1:43:00 AM
1,1-Dichloroethane	ND	5.0	μg/L	1	11/9/2009 1:43:00 AM
2-Butanone	ND	10	μ g /L	1	11/9/2009 1:43:00 AM
cis-1,2-Dichloroethene	ND	5.0	μg/L	1	11/9/2009 1:43:00 AM
Chloroform	ND	5.0	μg/L	1	11/9/2009 1:43:00 AM
1,1,1-Trichloroethane	ND	5.0	μg/L	1	11/9/2009 1:43:00 AM
Carbon tetrachloride	ND	5.0	µg/L	1	11/9/2009 1:43:00 AM
Benzene	ND	5.0	µg/L	1	11/9/2009 1:43:00 AM
1,2-Dichloroethane	ND	5.0	µg/L	1	11/9/2009 1;43:00 AM
Trichloroethene	ND	5.0	µg/L	1	11/9/2009 1:43:00 AM
1,2-Dichloropropane	ND	5.0	µg/L	1	11/9/2009 1:43:00 AM
Bromodichloromethane	ND	5.0	µg/L	1	11/9/2009 1:43:00 AM
4-Methyl-2-pentanone	ND	10	µg/L	1	11/9/2009 1:43:00 AM
cis-1,3-Dichloropropene	ND	5.0	µg/L	1	11/9/2009 1:43:00 AM
Toluene	ND	5.0	μg/L	1	11/9/2009 1:43:00 AM
trans-1,3-Dichloropropene	ND	5.0	μg/L	1	11/9/2009 1:43:00 AM
1,1,2-Trichloroethane	ND	5.0	µg/L	1	11/9/2009 1:43:00 AM
2-Hexanone	ND	10	µg/L	1	11/9/2009 1:43:00 AM
Tetrachloroethene	ND	5.0	µg/L	1	11/9/2009 1:43:00 AM
Dibromochloromethane	ND	5.0	µg/L	1	11/9/2009 1:43:00 AM
Chlorobenzene	ND	5.0	µg/L	1	11/9/2009 1:43:00 AN
Ethylbenzene	ND	5.0	μg/L	1	11/9/2009 1:43:00 AN
m,p-Xylene	ND	5.0	μg/L	1	11/9/2009 1:43:00 AM
o-Xylene	ND	5.0	μg/L	1	11/9/2009 1:43:00 AM
Styrene	ND	5.0	μg/L	1	11/9/2009 1:43:00 AM
Bromoform	ND	5.0	μg/L	1	11/9/2009 1:43:00 AM
1,1,2,2-Tetrachloroethane NOTES:	ND	5.0	μg/L	1	11/9/2009 1:43:00 AM

TICS: No compounds were detected.

Approved By:

Qualifiers:

- Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit

Date: 11-16-09

Page 7 of 7

- Value exceeds Maximum Contaminant Value
- Value above quantitation range
- Analyte detected below quantitation limits
- Spike Recovery outside accepted recovery limits

6034 Corporate Drive • E. Syracuse, NY 13057-1017 (315) 437 0255

Chain of Gustody Record

III Committee Indult Form

Special Turnaround Lab by: (Signature) □ Dropoff Lab Notification Received by: (Signature) Received by: (Signature) Received by: (Signature) ASP-CATI, Remarks Delivery (check one):

☐ y/☐ Sampled
☐ PicKup ☐ Dropc **ULI Internal Use Only** required) Time 450 ASP 000 Rec'd for 6 Time Time Time 8 2 Company: Sterrs + Wider (SH Relinquished by: (Signature) Date quighed by: (Signature) Date Relinquished by: (Signature) Date 6 Relinquished by: (Signature) Date Brian P. Dayle 2 Sampled by: (Please Print) 4 8 5 8 = Con-Š. tainers ō 9 N Grab or ULI Internal Use Only 20911016 pres. Note: The numbered columns above cross-reference with the numbered columns in the upper right-hand corner. size Comp. Gind Camp (Dmp gue Grab (Jamp type Client Project # / Project Name [Jockport City Landh] Agwadoss Agueous Agueous Site Location (city/state) Agreous sample bottle: Harmons Lockport, NY Haveous Matrix 13:00 10/29/09 13:50 13:30 1300 15/29/09 13:15 10/23/09 14:15 Time 00:11 60/62/01 るのよう 60/22/01 10/29/09 Date Client Stearns +Winder CHDING. [CL: 8260 VOAs Client Contact
Date Roullness parameter and method and Sample Location: 1945C rio Blank MW-95 MW-35 MM-8D MW-91 8 3 4 2 9 8

Syracuse

Rochester

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Albany

Binghamton

Fair Lawn (NJ)