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Letter of Transmittal

Date 3 March 2015
File Number 91221-685
From Elida S. Danaher

To State of Connecticut
Department of Energy and Environmental Protection
Bureau of Water Protection and Land Reuse
79 Elm Street
Hartford, Connecticut 06106-5127

Attention William Warzecha

Copy to B. Toal, CTDPH
R. Miller, EHHD
M. Hart, Town of Mansfield
J. Biancamano, UConn (Certification Letter Only)
P. Ferri, UConn

Subject UConn Landfill
Long Term Monitoring Plan Report

Copies	Date	Description
1 each	March 2015	Long Term Monitoring Plan Report Fall 2014 Semi-Annual Sampling Event Round #21

Transmitted via First class mail Overnight express Hand delivery Other

Remarks

**LONG-TERM MONITORING PLAN
FALL 2014 SEMI-ANNUAL SAMPLING ROUND #21
UCONN LANDFILL
STORRS, CONNECTICUT**



by

**Haley & Aldrich, Inc.
Rocky Hill, Connecticut**

for

**University of Connecticut
Storrs, Connecticut**

**File No. 91221-685
February 2015**



Haley & Aldrich, Inc.
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27 February 2015

Connecticut Department of Energy and Environmental Protection
Bureau of Water Protection and Land Reuse
79 Elm Street
Hartford, Connecticut 06106-5127

Attention: William Warzecha

Subject: Long Term Monitoring Plan
Fall 2014 Semi-Annual Sampling Round #21
UConn Landfill
Storrs, Connecticut

Ladies and Gentlemen:

The following certification is being submitted to the Department of Energy and Environmental Protection in accordance with the terms as delineated in the Consent Order No. SRD-101 issued 26 June 1998 for the document specified below:

- Long Term Monitoring Plan
Fall 2014 Semi-Annual Sampling Round #21
UConn Landfill
Storrs, Connecticut

I have personally examined and am familiar with the information submitted in this document and all attachments and certify that based on reasonable investigation, including my inquiry of those individuals responsible for obtaining the information, the submitted information is true, accurate and complete to the best of my knowledge and belief, and I understand that any false statement made in this document or its attachments may be punishable as a criminal offense.

Agreed and accepted as stated above:

Richard P. Standish, P. G., LEP
Authorized Agent for
Haley & Aldrich, Inc.

Richard A. Miller
Director,
Office of Environmental Policy
University of Connecticut

C: Richard Gray, UConn

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1. INTRODUCTION

This Long Term Monitoring Plan (LTMP) was prepared pursuant to the Consent Order # SRD-101 between the State of Connecticut and the University of Connecticut (UConn) regarding the solid waste disposal area on North Eagleville Road (Landfill and Former Chemical Pits) and the former disposal site in the vicinity of Parking Lot F (F Lot). An Interim Monitoring Program (IMP) was performed in order to monitor shallow ground water, surface water and bedrock groundwater quality in nearby domestic water supply wells until the LTMP required pursuant to paragraph B.4.e of the Consent Order was implemented. In September 2005, the University transitioned from the IMP to the LTMP. As part of this process, samples were collected from both the IMP and LTMP locations for three sampling quarters. These quarters, referred to as "transition rounds" were conducted in September and December 2005 and May 2006. Beginning with the October and November 2006 monitoring quarter, samples were only collected from the LTMP locations.

The objectives of the LTMP are:

- To assess the effectiveness of the remediation
- To monitor groundwater and surface water quality and trends, and
- To act as sentinel wells to protect human health and the environment.

Groundwater, surface water and soil gas samples are being obtained to verify that the remediation systems are working as planned. The Plan is also designed to protect human health and the environment by evaluating the concentrations of contaminants in groundwater and surface water over time. If increasing concentrations are observed, UConn and the Connecticut Department of Energy and Environmental Protection (CTDEEP) will reassess the remediation system design, expand the monitoring program, and/or take additional measures to protect human health and the environment, if necessary.

The LTMP includes sampling of media at multiple locations as shown on Figure 1:

- (1) six surface water locations;
- (2) five shallow groundwater monitoring wells;
- (3) five deep bedrock monitoring wells;
- (4) six active domestic wells on Meadowood Road and Separatist Road; and
- (5) four soil gas monitoring locations.

Installation of the landfill cap and leachate interceptor trenches (LITs) was completed in the spring of 2007. To date, slight improvements in groundwater quality have been observed. Analytical results continue to be evaluated and reported to the key parties and to the public.

This report documents the sampling round conducted in October 2014, also referred to as Round #21. In a letter to the University dated 16 April 2010, CTDEEP approved a reduction in the LTMP sampling frequency from quarterly to semi-annually to be conducted in the spring and fall seasons. The next sampling event is planned for March 2015.

2. SCOPE OF PROGRAM

The following paragraphs describe the rationale for each sampling location for the Long Term Monitoring Program based upon the approved Comprehensive Hydrogeologic Investigation and Remedial Action Plan, Addendum No. 2, dated July 2004.

2.1 Shallow Groundwater Monitoring Wells

Three shallow wells [B401(MW), B403(MW) & B404(MW)] were constructed in the overburden south, southeast and north of the landfill respectively, and downgradient of the LITs in February and March 2007. These wells function to monitor shallow groundwater quality migrating out of the landfill area and to assess the effectiveness of the landfill cover and LITs.

Two previously existing shallow monitoring wells, MW-3 and MW-4, were reinstalled in August 2007 in the same general area in F Lot however; they were offset several feet from their original locations. They function to monitor shallow groundwater quality downgradient of F Lot.

2.2 Deep Groundwater Monitoring Wells

Five bedrock (125 to 300 ft) groundwater monitoring wells are included in the LTMP. Three existing wells, MW-105R, B201R(MW), and B302R(MW) are located south and west of the landfill and former chemical pits. These wells were selected because they are situated in the direction of either suspected historical or known bedrock groundwater flow. Since permanent packer systems for discrete fracture interval sampling are installed in B201R(MW) and MW-105R, two samples are collected from each well. Two former residential water supply wells, located at 156 Hunting Lodge Road and 202 North Eagleville Road, are included in the LTMP because of their locations and construction depths. The University has not received permission to access the well at 156 Hunting Lodge Road therefore; it continues to be excluded from sampling events.

2.3 Surface Water Monitoring Locations

Six surface water-monitoring locations (SW-A through SW-F) are selected to assess surface water quality migrating from the landfill, former chemical pits, and F Lot areas SW-A through SW-E are strategically placed at the primary surface waters north (wetland and Cedar Swamp Brook drainage) and south (western tributary of Eagleville Brook drainage) of the landfill and former chemical pits area. SW-F is located downgradient of F Lot on an eastern tributary to Eagleville Brook.

2.4 Active Residential Water Supply Wells

Six active residential water supply wells are included in the LTMP:

- 38 Meadowood Road
- 41 Meadowood Road
- 65 Meadowood Road
- 202 Separatist Road
- 206 Separatist Road
- 211 Separatist Road

These residential wells are the closest active bedrock wells to the landfill and former chemical pits in the direction of suspected historical and known groundwater migration pathways in the fractured bedrock aquifer. The homeowners of 38 and 65 Meadowood Road have changed. Although UConn has attempted to get permission to continue monitoring these locations, permission was not granted at the time of this monitoring event therefore; they were not sampled.

2.5 Soil Gas Monitoring Locations

Four soil gas-monitoring points B501(GW), B502(GW), B503(GW) and B504(GW) were installed in the east, southeast, southwest and northwest quadrants of the landfill immediately outside the cap perimeter to monitor for potential gas migration away from the landfill. The monitoring points are 4-in. diameter PVC wells extending to depths ranging between 7.5 and 9.5 ft bgs with a slotted screen interval from the surface seal (approximately 2.5 ft bgs) to the depth of completion. The locations are lateral to the LITs where the likelihood of soil gas migration is presumed to be greatest.

2.6 Sampling Parameters

During the course of the Hydrogeologic Investigation, a comprehensive suite of analytical methods was selected to determine the nature of the contamination in the Study Area. A wide range of methods were used to ensure that any potential contaminant identified during review of historical records or interviews with knowledgeable personnel would be detected if present. Multiple rounds of groundwater and surface water sampling have shown that the contamination is confined to a few classes of compounds. Monitoring a select number of analytical methods accomplishes the objectives of the LTMP, that is, to assess effectiveness of remediation, monitor groundwater quality and trends and be protective of human health and the environment.

Groundwater and surface water samples were analyzed for the following parameters:

- Volatile Organic Compounds (VOCs) by EPA Method 524.2

- Total metals by EPA Method 200 Series

- Total mercury by EPA Method 7470/E245.1

- Other Inorganic Parameters

 - ammonia, nitrate and nitrite, total phosphorus, total dissolved solids, total suspended solids, alkalinity, hardness, chloride, sulfate, chemical oxygen demand, total organic carbon, biological oxygen demand and cyanide

- Field Screening Data

 - turbidity, conductivity, dissolved oxygen, oxygen reduction potential (ORP), pH, and temperature

Soil gas monitoring points were analyzed for methane and carbon dioxide using a multiple gas detection meter.

2.7 Sampling Frequency

As previously mentioned, to date, slight improvements to the groundwater quality have been observed. This round represents the Fall 2014 sampling and we anticipate Spring sampling to occur in or about April 2015.

3. SAMPLING PROCEDURES

Sampling procedures and analytical methods for the groundwater monitoring wells and surface water samples were conducted in accordance with the Comprehensive Hydrogeologic Investigation and Remedial Action Plan, Addendum No. 2, dated July 2004.

Sampling procedures for the residential water supply wells were conducted in accordance with procedures previously established by CTDEEP and the Department of Public Health (DPH) for the health consultation study completed in 1999. Samples were collected from the water supply system prior to treatment after running the tap for approximately eight minutes.

Samples from the residential water supply wells were analyzed using EPA drinking water methods as noted on the enclosed Table I.

4. SUMMARY OF RESULTS

The analytical results from the October 2014 LTMP round #21 sampling are summarized in Table I. VOC Concentration and Conductivity vs. Time Plots for selected bedrock wells [MW105R, B201R(MW), and B302R(MW)] and selected overburden wells [B401(MW) and B403(MW)] are included in Appendix A. A discussion of the results below is organized by general sample types and locations.

4.1 Shallow Groundwater Monitoring Wells

Samples from monitoring wells B401(MW), B403(MW) and B404(MW) were collected and submitted to Phoenix Environmental Laboratories (Phoenix), Manchester, Connecticut for analysis of VOCs, total metals, and nutrients. Both LITs and associated pumps were in operation at the time of this sampling event.

Similar to results from previous rounds, several VOCs including benzene, 1,4-dichlorobenzene, chlorobenzene and/or toluene were detected in monitoring wells B401(MW) and B403(MW). Concentrations of these compounds are below Remediation Standard Regulations (RSR) criteria. No VOCs were detected above laboratory reporting limits in the samples collected from B404(MW). Metal concentrations in all samples were below protective criteria. In general, concentrations of selected parameters and compounds appear consistent with previous sampling rounds.

VOCs were not detected in the samples collected from MW-3 or MW-4. Metal concentrations were below protective criteria. For quality control purposes, a duplicate sample was collected from MW-4. Results from the original and duplicate samples were in general agreement.

4.2 Deep Bedrock Monitoring Wells

Samples from these wells were collected and submitted to Phoenix for analysis of VOCs, total metals, and other inorganic parameters. VOCs were detected in discrete samples collected from the deeper fracture zone of MW-105R and both fracture zones of B201R(MW). VOCs were not detected above laboratory reporting limits for the shallow fracture (74 ft) in MW105R. Concentrations of 1,2-dichloroethane, benzene, and trichloroethene exceeded the GWPC in the sample from the deeper fracture zone in MW-105R. Concentrations of 1,2-dichloroethane and benzene exceeded the GWPC in both the upper and deeper fracture zones of B201R(MW). Analytical results of groundwater quality at MW105R and B201R(MW) are consistent with previous sampling events. Monitoring wells 202-NERD (unused domestic well at 202 N. Eagleville Road) and B302R-MW were completed at depths of 275 and 200 ft respectively and do not have discrete sampling systems installed, therefore integrated samples were collected. VOCs were not detected in the sample collected from 202-NERD or B302R-MW. Metal and nutrient parameters were within typical groundwater water ranges in all of the bedrock well samples.

For quality control purposes, a duplicate sample was collected from the deeper zone of MW105R. Results from the originals and duplicate samples were in general agreement.

4.3 Surface Water Samples

During this sampling event, surface water was collected from the four of the six (SW-B and SW-C were dry) monitoring locations and submitted to Phoenix for analysis of VOCs, metals and nutrients. VOCs were not detected. Metal and nutrient parameters were within typical surface water ranges and consistent with previous sampling rounds for these locations.

4.4 Active Residential Domestic Wells

Four of the six active domestic wells were sampled as part of this quarterly event. Both 38 and 65 Meadowood Road properties have been sold. UConn has attempted to contact new homeowners for permission to sample their well however; permission has not yet been granted. Results of the domestic well sampling were consistent with most previous rounds. VOCs were not detected above method reporting limits at any of the locations sampled. Metal and nutrient concentrations at all locations were within acceptable drinking water ranges.

4.5 Soil Gas Monitoring

Landfill gas is the natural by-product of the decomposition of solid waste in landfills and is comprised primarily of carbon dioxide and methane. A GEM2000 Landfill Gas Meter was used to sample and analyze methane, carbon dioxide and oxygen content at soil gas monitoring locations B501(GW), B502(GW), B503(GW) and B504(GW). Oxygen concentrations ranged from 14.3% at B504(GW) to 20.9% at B501(GW). Carbon dioxide readings ranged from 0.2% at B501(GW) to 6.5% at B503(GW). Methane gas concentrations ranged from 0.0% at B501(GW), B503(GW) and B504(GW) to 1.4% at B502(GW). These readings are generally consistent with previous monitoring events.

4.6 Consent Order SRD-101 Progress Report

During the period of March 2014 through October 2014, minimal amounts of leachate were collected and pumped to the UConn Water Pollution Control Facility from both the north and south Leachate Interceptor Trench systems (LITs). Evaluation of the leachate collection data shows a significant decrease in volume collected from the north LIT beginning in Fall 2013 and from the south LIT beginning in Summer 2012.

The following actions were taken to address decreased leachate recovery:

- engaged Haley & Aldrich to perform an investigation of equipment maintenance and operating procedures, including recommendations regarding options for increasing efficiency of the LITs;
- replaced the electric submersible pump in the north LIT; and
- replaced the control panel at the north pump station for the new electric pump.

During maintenance of the leachate collection system, recovery well discharge piping was determined to be nearly clogged with iron precipitate. UConn has retained Environmental Services, Inc. (ESI) to clean piping and perform necessary maintenance and repairs to restore system efficiency. In addition, UConn is currently evaluating options for pump replacement. Pump replacements will likely coincide with services being provided by ESI. Work is anticipated to be completed by late March 2015, weather permitting.

TABLE I
SUMMARY OF GROUNDWATER ANALYTICAL RESULTS
LONG-TERM MONITORING PLAN
UCONN LANDFILL
STORRS, CONNECTICUT

SAMPLE DESIGNATION	METHOD	RSR GAGPC	RSR SWPC	RSR RVC ¹	MW105R-74	MW105R-111	MW105RP-111	EB-100714	TB-100714	B201R(MW)-38
SAMPLING DATE					10/7/2014	10/7/2014	10/7/2014	10/7/2014	10/7/2014	10/8/2014
COMMENTS					Discrete	Discrete	Duplicate	Field Blank	Trip Blank	Discrete
WELL DEPTH (ft):										
LOCATION:					MW-105R	MW-105R	MW-105R			B201R-MW
Volatile Organic Compounds (ug/l)	524.2	(ug/l)	(ug/l)	(ug/l)						
1,1-Dichloroethane		70	NE	34,600	ND<0.50	2.9	2.5	ND<0.50	ND<0.50	0.64
1,2,4-Trichlorobenzene		70	NE	NE	ND<0.50	4.9	5.3	ND<0.50	ND<0.50	ND<0.50
1,2-Dichlorobenzene		600	170,000	30,500	ND<0.50	3	2.7	ND<0.50	ND<0.50	ND<0.50
1,2-Dichloroethane		1	2,970	21	ND<0.50	20	17	ND<0.50	ND<0.50	3.2
1,4-Dichlorobenzene		75	26,000	24,200	ND<0.50	10	9.5	ND<0.50	ND<0.50	0.86
Benzene		1	710	215	ND<0.50	92	79	ND<0.50	ND<0.50	1.6
Bromobenzene		NE	NE	NE	ND<0.50	25	23	ND<0.50	ND<0.50	2.2
Chlorobenzene		100	420,000	1,800	ND<0.50	42	36	ND<0.50	ND<0.50	3.7
Chloroform		6	14,100	287	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
cis-1,2-Dichloroethene		70	NE	NE	ND<0.50	15	14	ND<0.50	ND<0.50	3.4
Methylene chloride		5	48,000	50,000	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
Tetrachloroethene		5	88	1500	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
Toluene		1,000	4,000,000	23,500	ND<0.50	0.55	0.58	ND<0.50	ND<0.50	ND<0.50
Trichloroethene		5	2,340	219	ND<0.50	13	12	ND<0.50	ND<0.50	2.3
Vinyl chloride		2	15,750	2	ND<0.50	1.7	1.4	ND<0.50	ND<0.50	ND<0.50
Total Metals (mg/l)										
Aluminum	200.7/6010	NE	NE	NE	0.068	ND<0.010	ND<0.010	ND<0.010	--	0.048
Barium	6010/E200.7	1	NE	NE	0.092	0.092	0.089	ND<0.002	--	0.058
Calcium	200.7/6010	NE	NE	NE	117	67.9	65.5	ND<0.010	--	58.9
Copper	6010/E200.7	1.3	0.048	NE	ND<0.005	ND<0.005	ND<0.005	ND<0.005	--	ND<0.005
Iron	6010/E200.7	NE	NE	NE	3.35	0.215	0.208	0.014	--	0.082
Lead	7421/S3113B	0.015	0.013	NE	ND<0.002	ND<0.002	ND<0.002	ND<0.002	--	ND<0.002
Magnesium	200.7/6010	NE	NE	NE	13.5	6.55	6.67	ND<0.01	--	6.59
Manganese	200.7/6010	NE	NE	NE	0.542	0.143	0.145	ND<0.001	--	0.133
Nickel	200.7/6010	0.1	0.88	NE	0.002	ND<0.001	ND<0.001	ND<0.001	--	ND<0.001
Potassium	6010/E200.7	NE	NE	NE	4.3	2.9	2.8	ND<0.1	--	4
Silver	200.7/6010	0.036	0.012	NE	ND<0.001	ND<0.001	ND<0.001	ND<0.001	--	ND<0.001
Sodium	200.7/6010	NE	NE	NE	20.3	12.8	12.7	0.2	--	8.7
Vanadium	200.7/6010	0.05	NE	NE	ND<0.002	ND<0.002	ND<0.002	ND<0.002	--	ND<0.002
Zinc	200.7/6010	5	0.123	NE	0.006	0.003	0.003	ND<0.002	--	0.004

TABLE 1
SUMMARY OF GROUNDWATER ANALYTICAL RESULTS
LONG-TERM MONITORING PLAN
UCONN LANDFILL
STORRS, CONNECTICUT

SAMPLE DESIGNATION	METHOD	RSR GAGPC	RSR	SWPC	RSR RVC ⁴	MW105R-74	MW105R-111	MW105RP-111	EB-100714	TB-100714	B201R(MW)-38
SAMPLING DATE						10/7/2014	10/7/2014	10/7/2014	10/7/2014	10/7/2014	10/8/2014
COMMENTS						Discrete	Discrete	Duplicate	Field Blank	Trip Blank	Discrete
WELL DEPTH (ft.)											
LOCATION						MW-105R	MW-105R	MW-105R			B201R-MW
Other Analyses (mg/l)											
Alkalinity-CaCO ₃	SM2320B	--	--	--	--	322	131	132	ND< 20	--	221
Ammonia as Nitrogen	S4500NH3	--	--	--	--	0.07	ND<0.02	0.05	ND<0.02	--	0.08
B.O.D./5 day	SM5210B	--	--	--	--	ND<4.0	ND<4.0	ND<4.0	ND<4.0	--	7.7
C.O.D	SM5220.D	--	--	--	--	16	ND<10	ND<10	ND<10	--	35
Chloride	300.0/9056	--	--	--	--	18.8	16.1	15.9	ND< 3.0	--	14
Hardness (CaCO ₃)	300.0/9056	--	--	--	--	348	197	191	ND< 0.1	--	174
Nitrate as Nitrogen	300.0/9056	--	--	--	--	ND<0.05	ND<0.05	ND<0.05	ND<0.05	--	ND<0.05
Nitrite as Nitrogen	E365.2	--	--	--	--	ND<0.10	ND<0.01	ND<0.10	ND<0.01	--	ND<0.01
Phosphorus, as P	9010/335.3	--	--	--	--	0.02	0.02	0.02	ND<0.01	--	0.02
Sulfate	300.0/9056	--	--	--	--	18.8	14.9	14.8	ND< 3.0	--	14.3
Tot. Diss. Solids	SM2540C	--	--	--	--	420	190	180	ND<10	--	300
Total Organic Carbon	415.1/SW9060	--	--	--	--	5.3	1.1	1	ND<1.0	--	9.3
Total Suspended Solids	SM2540D	--	--	--	--	13	ND<5.0	ND<5.0	ND<5.0	--	ND<5.0
Field Screening Data											
Turbidity (NTU)		--	--	--	--	0	0	--	--	--	0
Conductivity (uS/cm)		--	--	--	--	606	282	--	--	--	426
Dissolved Oxygen (ppm)		--	--	--	--	0.11	0.01	--	--	--	0
ORP (mV)		--	--	--	--	-80	-81	--	--	--	-88
pH		--	--	--	--	7.01	7.38	--	--	--	7.32
Temperature (°C)		--	--	--	--	16.6	14.99	--	--	--	13.08

Notes and Abbreviations:

1. Samples were submitted to Phoenix Environmental Laboratories, Inc., Manchester, CT
2. RSR GA GPC: Connecticut Department of Environmental Protection (CTDEP) Remediation Standard Regulations (RSR) Groundwater Protection Criteria.
3. RSR SWPC: CTDEP RSR Surface Water Protection Criteria
4. RSR RVC: CTDEP RSR Residential Volatilization Criteria (1996). Proposed volatilization criteria has been removed from this table per CTDEP's directive issued 9 April 2010.
5. NE: RSR criteria not established
6. <: compound not detected
7. Blank spaces, "--" or "NA" indicate compound not analyzed
8. uS/cm: microsiemens per centimeter.
9. ug/l: micrograms per liter, mg/l: milligrams per liter
10. NTU: Nephelometric Turbidity Units.
11. Methods are EPA unless otherwise specified.
12. Organic qualifier codes: (J): estimated result; (U): not detected above associated value
13. Inorganic qualifier codes: (U): not detected above associated value
14. Bold values exceed one or more of the RSRs

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UCONN LANDFILL
STORRS, CONNECTICUT

SAMPLE DESIGNATION	METHOD	RSR GAGPC	RSR SWPC	RSR RVC ⁴	B201R(MW)-60	B401(MW)	B403-MW	EB-100814	TB-100814	B404(MW)
SAMPLING DATE					10/8/2014	10/8/2014	10/8/2014	10/8/2014	10/8/2014	10/9/2014
COMMENTS					Discrete			Field Blank	Trip Blank	
WELL DEPTH (ft.)						11.01	15.2			11.35
LOCATION					B201R-MW	B401(MW)	B403(MW)			B404(MW)
Volatile Organic Compounds (ug/l)	524.2	(ug/l)	(ug/l)	(ug/l)						
1,1-Dichloroethane		70	NE	34,600	1.2	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
1,2,4-Trichlorobenzene		70	NE	NE	0.78	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
1,2-Dichlorobenzene		600	170,000	30,500	0.8	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
1,2-Dichloroethane		1	2,970	21	6.3	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
1,4-Dichlorobenzene		75	26,000	24,200	1.8	0.83	0.52	ND<0.50	ND<0.50	ND<0.50
Benzene		1	710	215	2.5	0.56	0.58	ND<0.50	ND<0.50	ND<0.50
Bromobenzene		NE	NE	NE	5.2	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
Chlorobenzene		100	420,000	1,800	10	2	2.5	ND<0.50	ND<0.50	ND<0.50
Chloroform		6	14,100	287	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
cis-1,2-Dichloroethene		70	NE	NE	4.9	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
Methylene chloride		5	48,000	50,000	ND<0.50	ND<0.50	ND<0.50	0.69	ND<0.50	ND<0.50
Tetrachloroethene		5	88	1500	0.81	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
Toluene		1,000	4,000,000	23,500	ND<0.50	1.1	ND<0.50	ND<0.50	ND<0.50	ND<0.50
Trichloroethene		5	2,340	219	3.2	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
Vinyl chloride		2	15,750	2	0.61	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
Total Metals (mg/l)										
Aluminum	200.7/6010	NE	NE	NE	0.047	0.048	0.029	ND<0.010	--	ND<0.010
Barium	6010/E200.7	1	NE	NE	0.02	0.1	0.125	ND<0.002	--	0.174
Calcium	200.7/6010	NE	NE	NE	12.2	52.9	40.9	ND<0.010	--	48.8
Copper	6010/E200.7	1.3	0.048	NE	ND<0.005	ND<0.005	ND<0.005	ND<0.005	--	ND<0.005
Iron	6010/E200.7	NE	NE	NE	ND<0.010	66.3	71.7	ND<0.010	--	9.45
Lead	7421/S3113B	0.015	0.013	NE	ND<0.002	ND<0.002	ND<0.002	ND<0.002	--	ND<0.002
Magnesium	200.7/6010	NE	NE	NE	1.46	11.2	8.13	ND<0.01	--	10.5
Manganese	200.7/6010	NE	NE	NE	0.001	0.783	3.72	ND<0.001	--	4.77
Nickel	200.7/6010	0.1	0.88	NE	ND<0.001	ND<0.001	ND<0.001	ND<0.001	--	0.005
Potassium	6010/E200.7	NE	NE	NE	7.4	13.5	10.6	ND<0.1	--	8.2
Silver	200.7/6010	0.036	0.012	NE	ND<0.001	ND<0.001	ND<0.001	ND<0.001	--	ND<0.001
Sodium	200.7/6010	NE	NE	NE	26.8	15.4	28.5	0.1	--	18.4
Vanadium	200.7/6010	0.05	NE	NE	ND<0.002	ND<0.002	ND<0.002	ND<0.002	--	ND<0.002
Zinc	200.7/6010	5	0.123	NE	0.004	ND<0.002	ND<0.002	ND<0.002	--	0.003

TABLE 1
SUMMARY OF GROUNDWATER ANALYTICAL RESULTS
LONG-TERM MONITORING PLAN
UCONN LANDFILL
STORRS, CONNECTICUT

SAMPLE DESIGNATION	METHOD	RSR GAGPC	RSR SWPC	RSR RVC ⁴	B201R(MW)-60	B401(MW)	B403-MW	EB-100814	TB-100814	B404(MW)
SAMPLING DATE					10/8/2014	10/8/2014	10/8/2014	10/8/2014	10/8/2014	10/9/2014
COMMENTS					Discrete			Field Blank	Trip Blank	
WELL DEPTH (ft.)						11.01	15.2			11.35
LOCATION					B201R-MW	B401(MW)	B403(MW)			B404(MW)
Other Analyses (mg/l)										
Alkalinity-CaCO ₃	SM2320B	--	--	--	46	171	102	ND< 20	--	39
Ammonia as Nitrogen	S4500NH3	--	--	--	ND<0.04	11.3	1.29	0.04	--	0.77
B.O.D./5-day	SM5210B	--	--	--	11	12	10	ND<4.0	--	ND<4.0
C.O.D.	SM5220.D	--	--	--	89	42	25	ND<10	--	ND< 10
Chloride	300.0/9056	--	--	--	14.3	87.5	119	ND< 3.0	--	112
Hardness (CaCO ₃)	300.0/9056	--	--	--	36.5	178	136	ND<0.1	--	165
Nitrate as Nitrogen	300.0/9056	--	--	--	ND<0.05	ND<0.05	ND<0.05	ND<0.05	--	ND<0.05
Nitrite as Nitrogen	E365.2	--	--	--	0.04	ND<0.01	ND<0.01	ND<0.01	--	ND<0.01
Phosphorus, as P	9010/335.3	--	--	--	0.03	0.12	0.03	ND<0.01	--	0.02 U
Sulfate	300.0/9056	--	--	--	92.1	24	29.8	ND< 3.0	--	21.3
Tot. Diss. Solids	SM2540C	--	--	--	260	430	450	ND<10	--	390
Total Organic Carbon	415.1/SW9060	--	--	--	25	7.9	1.6	ND<1.0	--	ND<1.0
Total Suspended Solids	SM2540D	--	--	--	ND<5.0	65	16	ND<5.0	--	ND<5.0
Field Screening Data										
Turbidity (NTU)		--	--	--	0	0	0	--	--	0
Conductivity (uS/cm)		--	--	--	332	869	704	--	--	463
Dissolved Oxygen (ppm)		--	--	--	0	1.11	0.2	--	--	3.3
ORP (mV)		--	--	--	-130	-135	-24	--	--	45
pH		--	--	--	8.69	5.99	6.04	--	--	6.05
Temperature (°C)		--	--	--	13.22	16.34	15.66	--	--	16.1

Notes and Abbreviations:

1. Samples were submitted to Phoenix Environmental Laboratories, Inc., Manchester, CT
2. RSR GA GPC: Connecticut Department of Environmental Protection (CTDEP) Remediation Standard Regulations (RSR) Groundwater Protection Criteria.
3. RSR SWPC: CTDEP RSR Surface Water Protection Criteria
4. RSR RVC: CTDEP RSR Residential Volatilization Criteria (1996). Proposed volatilization criteria has been removed from this table per CTDEP's directive issued 9 April 2010.
5. NE: RSR criteria not established
6. <: compound not detected
7. Blank spaces, "--" or "NA" indicate compound not analyzed
8. uS/cm: microsiemens per centimeter.
9. ug/l: micrograms per liter, mg/l: milligrams per liter
10. NTU: Nephelometric Turbidity Units.
11. Methods are EPA unless otherwise specified.
12. Organic qualifier codes: (J): estimated result; (U): not detected above associated value
13. Inorganic qualifier codes: (U): not detected above associated value
14. Bold values exceed one or more of the RSRs

TABLE I
SUMMARY OF GROUNDWATER ANALYTICAL RESULTS
LONG-TERM MONITORING PLAN
UCONN LANDFILL
STORRS, CONNECTICUT

SAMPLE DESIGNATION	METHOD	RSR GAGPC	RSR SWPC	RSR RVC ¹	EB-100914	TB-100914	202-NERD	B302R-MW	MW-3	MW-4
SAMPLING DATE					10/9/2014	10/9/2014	10/9/2014	10/8/2014	10/9/2014	10/9/2014
COMMENTS					Field Blank	Trip Blank	Inactive	Open hole		
WELL DEPTH (ft):							320	275	18.65	22.95
LOCATION:							North Eagleville Rd	B302R-MW	F Lot	F Lot
Volatile Organic Compounds (ug/l)	524.2	(ug/l)	(ug/l)	(ug/l)						
1,1-Dichloroethane		70	NE	34,600	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
1,2,4-Trichlorobenzene		70	NE	NE	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
1,2-Dichlorobenzene		600	170,000	30,500	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
1,2-Dichloroethane		1	2,970	21	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
1,4-Dichlorobenzene		75	26,000	24,200	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
Benzene		1	710	215	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
Bromobenzene		NE	NE	NE	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
Chlorobenzene		100	420,000	1,800	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
Chloroform		6	14,100	287	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
cis-1,2-Dichloroethene		70	NE	NE	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
Methylene chloride		5	48,000	50,000	ND<1.0	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
Tetrachloroethene		5	88	1500	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
Toluene		1,000	4,000,000	23,500	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
Trichloroethene		5	2,340	219	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
Vinyl chloride		2	15,750	2	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
Total Metals (mg/l)										
Aluminum	200.7/6010	NE	NE	NE	ND<0.010	--	0.048	0.132	0.036	0.048
Barium	6010/E200.7	1	NE	NE	ND<0.002	--	ND<0.002	0.008	0.229	0.337
Calcium	200.7/6010	NE	NE	NE	0.013	--	15.8	12.5	140	102
Copper	6010/E200.7	1.3	0.048	NE	ND<0.005	--	ND<0.005	ND<0.005	ND<0.005	ND<0.005
Iron	6010/E200.7	NE	NE	NE	0.012	--	0.113	0.102	28	0.51
Lead	7421/S3113B	0.015	0.013	NE	ND<0.002	--	ND<0.002	ND<0.002	ND<0.002	ND<0.002
Magnesium	200.7/6010	NE	NE	NE	ND<0.01	--	2.28	0.24	49	20.2
Manganese	200.7/6010	NE	NE	NE	ND<0.001	--	0.012	0.003	6.75	0.911
Nickel	200.7/6010	0.1	0.38	NE	ND<0.001	--	ND<0.001	ND<0.001	0.005	0.016
Potassium	6010/E200.7	NE	NE	NE	ND<0.1	--	1.2	3	20.1	17.5
Silver	200.7/6010	0.036	0.012	NE	ND<0.001	--	ND<0.001	ND<0.001	ND<0.001	ND<0.001
Sodium	200.7/6010	NE	NE	NE	ND<0.1	--	6.9	10.6	235	533
Vanadium	200.7/6010	0.05	NE	NE	ND<0.002	--	ND<0.002	0.007	ND<0.002	ND<0.002
Zinc	200.7/6010	5	0.123	NE	ND<0.002	--	0.003	0.006	0.005	0.018

TABLE 1
SUMMARY OF GROUNDWATER ANALYTICAL RESULTS
LONG-TERM MONITORING PLAN
UCONN LANDFILL
STORRS, CONNECTICUT

SAMPLE DESIGNATION	METHOD	RSR GAGPC	RSR SWPC	RSR RVC ⁴	EB-100914	TB-100914	202-NERD	B302R-MW	MW-3	MW-4
SAMPLING DATE					10/9/2014	10/9/2014	10/9/2014	10/8/2014	10/9/2014	10/9/2014
COMMENTS					Field Blank	Trip Blank	Inactive	Open hole		
WELL DEPTH (ft.):							320	275	18.65	22.95
LOCATION:							North Eagleville Rd.	B302R-MW	F Lot	F Lot
Other Analyses (mg/l)										
Alkalinity-CaCO ₃	SM2320B	--	--	--	ND< 20	--	41	37	90	44
Ammonia as Nitrogen	S4500NH3	--	--	--	ND<0.02	--	0.04	0.81	0.9	0.8
B.O.D./5 day	SM5210B	--	--	--	ND<4.0	--	ND<4.0	ND<4.0	ND<4.0	ND<4.0
C.O.D.	SM5220.D	--	--	--	ND< 10	--	ND< 10	ND<10	27	108 J
Chloride	300.0/9056	--	--	--	ND< 3.0	--	ND< 3.0	ND< 3.0	681	1,160
Hardness (CaCO ₃)	300.0/9056	--	--	--	ND< 0.1	--	48.8	32.2	551	338
Nitrate as Nitrogen	300.0/9056	--	--	--	ND<0.05	--	ND<0.05	0.07	ND<0.05	0.2
Nitrite as Nitrogen	E365.2	--	--	--	ND<0.01	--	ND<0.01	ND<0.01	ND<0.01	ND<0.01
Phosphorus, as P	9010/335.3	--	--	--	0.02	--	0.01 U	0.03	0.02 U	0.01 U
Sulfate	300.0/9056	--	--	--	ND< 3.0	--	12	35	50.6	16.5
Tot. Diss. Solids	SM2540C	--	--	--	ND< 10	--	89	100	1,500	2,000
Total Organic Carbon	415.1/SW9060	--	--	--	ND<1.0	--	ND<1.0	ND<1.0	2.1	1.6
Total Suspended Solids	SM2540D	--	--	--	ND<5.0	--	ND<5.0	6	28	ND<5.0
Field Screening Data										
Turbidity (NTU)		--	--	--	--	--	0	0	0	0
Conductivity (uS/cm)		--	--	--	--	--	117	182	260	320
Dissolved Oxygen (ppm)		--	--	--	--	--	5.3	1.71	0.57	1.15
ORP (mV)		--	--	--	--	--	-14	36	-43	159
pH		--	--	--	--	--	7.7	8.61	5.63	5.65
Temperature (°C)		--	--	--	--	--	19.82	13.35	19.39	16.96

Notes and Abbreviations:

1. Samples were submitted to Phoenix Environmental Laboratories, Inc., Manchester, CT
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4. RSR RVC: CTDEP RSR Residential Volatilization Criteria (1996). Proposed volatilization criteria has been removed from this table per CTDEP's directive issued 9 April 2010.
5. NE: RSR criteria not established
6. <: compound not detected
7. Blank spaces, "--" or "NA" indicate compound not analyzed
8. uS/cm: microsiemens per centimeter.
9. ug/l: micrograms per liter, mg/l: milligrams per liter
10. NTU: Nephelometric Turbidity Units.
11. Methods are EPA unless otherwise specified.
12. Organic qualifier codes: (J): estimated result; (U): not detected above associated value
13. Inorganic qualifier codes: (U): not detected above associated value
14. Bold values exceed one or more of the RSRs

TABLE 1
SUMMARY OF GROUNDWATER ANALYTICAL RESULTS
LONG-TERM MONITORING PLAN
UCONN LANDFILL
STORRS, CONNECTICUT

SAMPLE DESIGNATION	METHOD	RSR GAGPC	RSR SWPC	RSR RVC ⁴	MW-4P	SW-A	SW-D	SW-E	SW-F
SAMPLING DATE					10/9/2014	10/6/2014	10/6/2014	10/6/2014	10/6/2014
COMMENTS					Duplicate	Surface Water	Surface Water	Surface Water	Surface Water
WELL DEPTH (ft.)									
LOCATION									
Volatile Organic Compounds (ug/l)	524.2	(ug/l)	(ug/l)	(ug/l)					
1,1-Dichloroethane	70	NE	34,600	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
1,2,4-Trichlorobenzene	70	NE	NE	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
1,2-Dichlorobenzene	600	170,000	30,500	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
1,2-Dichloroethane	1	2,970	21	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
1,4-Dichlorobenzene	75	26,000	24,200	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
Benzene	1	710	215	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
Bromobenzene	NE	NE	NE	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
Chlorobenzene	100	420,000	1,800	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
Chloroform	6	14,100	287	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
cis-1,2-Dichloroethene	70	NE	NE	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
Methylene chloride	5	48,000	50,000	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
Tetrachloroethene	5	88	1500	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
Toluene	1,000	4,000,000	23,500	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
Trichloroethene	5	2,340	219	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
Vinyl chloride	2	15,750	2	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
Total Metals (mg/l)									
Aluminum	200.7/6010	NE	NE	NE	0.04	0.018	0.043	0.022	0.088
Barium	6010/E200.7	1	NE	NE	0.334	0.044	0.038	0.082	0.122
Calcium	200.7/6010	NE	NE	NE	101	32.1	45.1	60.8	115
Copper	6010/E200.7	1.3	0.048	NE	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.005
Iron	6010/E200.7	NE	NE	NE	0.556	2.17	0.073	0.336	2.94
Lead	7421/S3113B	0.015	0.013	NE	ND<0.002	ND<0.002	ND<0.002	ND<0.002	ND<0.002
Magnesium	200.7/6010	NE	NE	NE	20.3	8.52	12.1	13.8	27.1
Manganese	200.7/6010	NE	NE	NE	0.931	0.646	0.035	0.246	0.525
Nickel	200.7/6010	0.1	0.88	NE	0.016	0.002	0.004	0.004	0.002
Potassium	6010/E200.7	NE	NE	NE	17.3	3.9	3.2	4.2	10.6
Silver	200.7/6010	0.036	0.012	NE	ND<0.001	ND<0.001	ND<0.001	ND<0.001	ND<0.001
Sodium	200.7/6010	NE	NE	NE	517	33.3	21.6	52.5	154
Vanadium	200.7/6010	0.05	NE	NE	ND<0.002	ND<0.002	ND<0.002	ND<0.002	ND<0.002
Zinc	200.7/6010	5	0.123	NE	0.018	ND<0.002	0.005	0.075	0.008

TABLE 1
SUMMARY OF GROUNDWATER ANALYTICAL RESULTS
LONG-TERM MONITORING PLAN
UCONN LANDFILL
STORRS, CONNECTICUT

SAMPLE DESIGNATION	METHOD	RSR GAGPC	RSR SWPC	RSR RVC ¹	MW-4P	SW-A	SW-D	SW-E	SW-F
SAMPLING DATE					10/9/2014	10/6/2014	10/6/2014	10/6/2014	10/6/2014
COMMENTS					Duplicate	Surface Water	Surface Water	Surface Water	Surface Water
WELL DEPTH (ft):									
LOCATION:									
Other Analyses (mg/l)									
Alkalinity-CaCO ₃	SM2320B	--	--	--	44	58	ND< 20	ND< 20	110
Ammonia as Nitrogen	S4500NH ₃	--	--	--	0.8	0.06	0.03	0.07	0.16
B.O.D./5 day	SM5210B	--	--	--	ND<4.0	ND<4.0	ND<4.0	ND<4.0	ND<4.0
C.O.D.	SM5220.D	--	--	--	27 J	14	ND<10	12	12
Chloride	300.0/9056	--	--	--	1,210	89.5	82.9	121	430
Hardness (CaCO ₃)	300.0/9056	--	--	--	336	115	162	209	399
Nitrate as Nitrogen	300.0/9056	--	--	--	0.23	ND<0.05	0.08	ND<0.05	0.18
Nitrite as Nitrogen	E365.2	--	--	--	ND<0.01	ND<0.10	ND<0.10	ND<0.10	ND<0.02
Phosphorus, as P	9010/335.3	--	--	--	0.01 U	0.04	0.02	0.02	0.02
Sulfate	300.0/9056	--	--	--	17.5	4.6	61.1	137	36.2
Tot. Diss. Solids	SM2540C	--	--	--	2,000	260	290	410	900
Total Organic Carbon	415.1/SW9060	--	--	--	1.9	6.1	3.2	3.4	2.8
Total Suspended Solids	SM2540D	--	--	--	ND<5.0	ND<5.0	ND<5.0	ND<5.0	11
Field Screening Data									
Turbidity (NTU)		--	--	--	--	22.5	3.5	3.8	4.1
Conductivity (uS/cm)		--	--	--	--	429	458	734	1630
Dissolved Oxygen (ppm)		--	--	--	--	4.41	6.13	5.72	6.39
ORP (mV)		--	--	--	--	165	216	223	5
pH		--	--	--	--	5.97	5.58	5	6.31
Temperature (°C)		--	--	--	--	16.91	15.22	15.93	16.91

Notes and Abbreviations:

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4. RSR RVC: CTDEP RSR Residential Volatilization Criteria (1996). Proposed volatilization criteria has been removed from this table per CTDEP's directive issued 9 April 2010.
5. NE: RSR criteria not established
6. <: compound not detected
7. Blank spaces, "--" or "NA" indicate compound not analyzed
8. uS/cm: microsiemens per centimeter.
9. ug/l: micrograms per liter, mg/l: milligrams per liter
10. NTU: Nephelometric Turbidity Units.
11. Methods are EPA unless otherwise specified.
12. Organic qualifier codes: (J): estimated result; (U): not detected above associated value
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14. Bold values exceed one or more of the RSRs

TABLE 1
SUMMARY OF GROUNDWATER ANALYTICAL RESULTS
LONG-TERM MONITORING PLAN
UCONN LANDFILL
STORRS, CONNECTICUT

SAMPLE DESIGNATION	METHOD	RSR GAGPC	RSR SWPC	RSR RVC ⁴	TB-100614	41-MWRD	202-SRD	206-SRD	211-SRD	TB-101014
SAMPLING DATE					10/6/2014	10/10/2014	10/10/2014	10/10/2014	10/10/2014	10/10/2014
COMMENTS					Trip Blank	Active	Active	Active	Active	Trip Blank
WELL DEPTH (ft.):						Unknown	Unknown	Unknown	Unknown	
LOCATION:						Meadowood Road	Separatist Road	Separatist Road	Separatist Road	
Volatile Organic Compounds (ug/l)	524.2	(ug/l)	(ug/l)	(ug/l)						
1,1-Dichloroethane		70	NE	34,600	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
1,2,4-Trichlorobenzene		70	NE	NE	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
1,2-Dichlorobenzene		600	170,000	30,500	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
1,2-Dichloroethane		1	2,970	21	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
1,4-Dichlorobenzene		75	26,000	24,200	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
Benzene		1	710	215	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
Bromobenzene		NE	NE	NE	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
Chlorobenzene		100	420,000	1,800	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
Chloroform		6	14,100	287	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
cis-1,2-Dichloroethene		70	NE	NE	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
Methylene chloride		5	48,000	50,000	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
Tetrachloroethene		5	88	1500	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
Toluene		1,000	4,000,000	23,500	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
Trichloroethene		5	2,340	219	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
Vinyl chloride		2	15,750	2	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
Total Metals (mg/l)										
Aluminum	200.7/6010	NE	NE	NE	--	0.043	0.04	ND<0.010	ND<0.010	--
Barium	6010/E200.7	1	NE	NE	--	ND<0.002	0.008	0.004	0.011	--
Calcium	200.7/6010	NE	NE	NE	--	17.3	25.5	39.3	36.6	--
Copper	6010/E200.7	1.3	0.048	NE	--	ND<0.005	0.028	0.046	0.012	--
Iron	6010/E200.7	NE	NE	NE	--	0.144	0.04	0.012	ND<0.010	--
Lead	7421/S3113B	0.015	0.013	NE	--	ND<0.002	ND<0.002	ND<0.002	ND<0.002	--
Magnesium	200.7/6010	NE	NE	NE	--	3.03	6.25	6.76	9.06	--
Manganese	200.7/6010	NE	NE	NE	--	0.082	ND<0.001	ND<0.001	0.004	--
Nickel	200.7/6010	0.1	0.88	NE	--	ND<0.001	ND<0.001	ND<0.001	ND<0.001	--
Potassium	6010/E200.7	NE	NE	NE	--	1.2	2.8	5.4	4	--
Silver	200.7/6010	0.036	0.012	NE	--	ND<0.001	ND<0.001	ND<0.001	ND<0.001	--
Sodium	200.7/6010	NE	NE	NE	--	6.2	6.6	9.8	10.9	--
Vanadium	200.7/6010	0.05	NE	NE	--	ND<0.002	0.004	ND<0.002	0.002	--
Zinc	200.7/6010	5	0.123	NE	--	ND<0.002	0.013	0.012	0.012	--

TABLE I
SUMMARY OF GROUNDWATER ANALYTICAL RESULTS
LONG-TERM MONITORING PLAN
UCONN LANDFILL
STORRS, CONNECTICUT

SAMPLE DESIGNATION	METHOD	RSR GAGPC	RSR SWPC	RSR RVC ⁴	TB-100614	41-MWRD	202-SRD	206-SRD	211-SRD	TB-101014
SAMPLING DATE					10/6/2014	10/10/2014	10/10/2014	10/10/2014	10/10/2014	10/10/2014
COMMENTS					Trip Blank	Active	Active	Active	Active	Trip Blank
WELL DEPTH (ft):						Unknown	Unknown	Unknown	Unknown	
LOCATION:						Meadowood Road	Separatist Road	Separatist Road	Separatist Road	
Other Analyses (mg/l):										
Alkalinity-CaCO ₃	SM2320B	--	--	--	--	45	62	75	65	--
Ammonia as Nitrogen	S4500NH3	--	--	--	--	ND<0.02	ND<0.02	ND<0.02	ND<0.02	--
B.O.D./5 day	SM5210B	--	--	--	--	ND<4.0	ND<4.0	ND<4.0	ND<4.0	--
C.O.D.	SM5220.D	--	--	--	--	ND<10	ND<10	ND<10	ND<10	--
Chloride	300.0/9056	--	--	--	--	5.3	16.8	34.7	45.2	--
Hardness (CaCO ₃)	300.0/9056	--	--	--	--	55.7	89.4	126	129	--
Nitrate as Nitrogen	300.0/9056	--	--	--	--	ND<0.05	0.79	1.97	2.51	--
Nitrite as Nitrogen	E365.2	--	--	--	--	ND<0.01	ND<0.01	ND<0.01	ND<0.01	--
Phosphorus, as P	9010/335.3	--	--	--	--	0.02	0.02	0.01	0.01	--
Sulfate	300.0/9056	--	--	--	--	12	14.3	17.3	16	--
Tot. Diss. Solids	SM2540C	--	--	--	--	89	130	190	220	--
Total Organic Carbon	415.1/SW9060	--	--	--	--	ND<1.0	ND<1.0	ND<1.0	ND<1.0	--
Total Suspended Solids	SM2540D	--	--	--	--	ND<5.0	ND<5.0	ND<5.0	ND<5.0	--
Field Screening Data										
Turbidity (NTU)		--	--	--	--	0	0	1.6	0	--
Conductivity (uS/cm)		--	--	--	--	129	99	289	295	--
Dissolved Oxygen (ppm)		--	--	--	--	7.02	19.92	1.6	11.48	--
ORP (mV)		--	--	--	--	155	169	164	155	--
pH		--	--	--	--	7.54	6.95	7.43	6.95	--
Temperature (°C)		--	--	--	--	15.09	13.21	24.29	15.07	--

Notes and Abbreviations:

1. Samples were submitted to Phoenix Environmental Laboratories, Inc., Manchester, CT
2. RSR GA GPC: Connecticut Department of Environmental Protection (CTDEP) Remediation Standard Regulations (RSR) Groundwater Protection Criteria.
3. RSR SWPC: CTDEP RSR Surface Water Protection Criteria
4. RSR RVC: CTDEP RSR Residential Volatilization Criteria (1996). Proposed volatilization criteria has been removed from this table per CTDEP's directive issued 9 April 2010.
5. NE: RSR criteria not established
6. <: compound not detected
7. Blank spaces, "--" or "NA" indicate compound not analyzed
8. uS/cm: microsiemens per centimeter.
9. ug/l: micrograms per liter, mg/l: milligrams per liter
10. NTU: Nephelometric Turbidity Units.
11. Methods are EPA unless otherwise specified.
12. Organic qualifier codes: (J): estimated result; (U): not detected above associated value
13. Inorganic qualifier codes: (U): not detected above associated value
14. Bold values exceed one or more of the RSRs