



**MASSACHUSETTS CONTINGENCY PLAN
IMMEDIATE RESPONSE ACTION STATUS REPORT
and
LANDFILL MONITORING REPORT
1ST QUARTER 2017**

**TOWN OF EASTHAM LANDFILL
255 OLD ORCHARD ROAD
EASTHAM, MASSACHUSETTS**

DEP RTN 4-24301

March 31, 2017

Prepared for:

Town of Eastham
2500 State Highway
Eastham, MA 02642-2544

Prepared by:

Environmental Strategies & Management, Inc.
273 West Main St
Norton, MA 02766

ES&M Project No. 2016-055

CONTENTS

1.0 INTRODUCTION	1
1.1 <i>Background</i>	1
1.2 <i>Purpose</i>	1
2.0 IMMEDIATE RESPONSE ACTION ACTIVITIES	1
3.0 LANDFILL MONITORING PROGRAM ACTIVITIES	3
3.1 <i>Landfill Monitoring Well Sample Collection</i>	3
3.2 <i>Landfill Soil Gas Monitoring</i>	3
3.3 <i>Private Well Sample Collection</i>	4
4.0 FUTURE SCHEDULE OF IRA AND LMP ACTIVITIES	4
4.1 <i>Immediate Response Action</i>	4
4.2 <i>Landfill Monitoring Plan</i>	4
5.0 PUBLIC OUTREACH	4

FIGURES

- 1 Site Map

TABLES

- 1 MWS Connection Status
- 2 Summary of Private Well Sampling Program Analytical Results
- 3 Summary of Landfill Monitoring Plan Requirements
- 4 Summary of Landfill Monitoring Plan Analytical Results

APPENDICES

- A Chief Municipal Officer and Board of Health Letter
- B Field Sampling Forms
- C Laboratory Report

1.0 INTRODUCTION

This Immediate Response Action (IRA) Status report has been prepared in accordance with the Massachusetts Contingency Plan (MCP) for Massachusetts Department of Environmental Protection (MassDEP) Release Tracking Number (RTN) 4-24301 by Environmental Strategies & Management, Inc. (ES&M) on behalf of the Town of Eastham. This report also satisfies the reporting requirements described in the Town of Eastham's Landfill Monitoring Plan (LMP), approved by MassDEP on August 14, 2012, and modified on September 25, 2014.

1.1 Background

Previous status reports published by ES&M have provided background information regarding the Eastham Landfill and the occurrence of 1,4-dioxane in drinking water wells around the landfill. The most recent report that includes this information is the IRA Status Report for the first quarter of 2014 (submitted to MassDEP by ES&M on March 31, 2014). Since the background information does not change, quarterly status reports focus on activities completed during the specific report period.

During Town Meeting held on Monday, May 4, 2015, voters in Eastham approved funding for a municipal water system that will bring public water to the entire town. This approval supplements the "backbone" water system that was approved in 2014. The municipal water system, once in place and operational, will serve as a permanent solution to mitigate the presence of 1,4-dioxane in private drinking water wells around the landfill.

1.2 Purpose

This IRA Status and Landfill Monitoring Report documents activities undertaken at and around the Eastham Landfill during the 1st quarter of 2017 (December 1, 2016, through February 28, 2017).

2.0 IMMEDIATE RESPONSE ACTION ACTIVITIES

The primary focus of the IRA program has been to identify private drinking water wells that have been impacted by 1,4-dioxane in groundwater emanating from the landfill, and to provide alternative safe drinking water to affected residents. The IRA program has also included evaluation of appropriate and feasible mitigating measures to remove 1,4-dioxane from drinking water. In 2014, IRA measures also included activities to better understand the nature and origin of other sources of 1,4-dioxane in the drinking water aquifer.

The IRA status reports submitted in 2013 provided details of the initial IRA activities. An IRA Plan Modification was submitted on March 6, 2014, to describe implementation

of alternate laboratory methods, outline a revised private well sampling protocol, clarify the ongoing monitoring schedule, and summarize future IRA activities. A second IRA Plan Modification was submitted on June 30, 2015, to discontinue annual drinking water sample collection and laboratory analysis from wells exhibiting concentrations of 1,4-dioxane above 0.3 µg/L, since residents in this category have been advised to use bottled water for consumptive purposes. The Town offers to provide bottled water to all residents in this category until they are connected to the Town's municipal water system.

One additional IRA Plan Modification (ES&M, December 22, 2016) outlines procedures and policies relative to connections to the Town's municipal water system (MWS), which is currently under construction. This Plan Modification also describes policies for the conversion of private drinking water wells to irrigation wells within the defined Mandatory Municipal Water Supply Zone.

The Town of Eastham Health Department has been tracking the construction of the water system and has been notifying ES&M when homes in the landfill study area are connected. ES&M has discontinued collection of water samples from homes where concentrations of 1,4 dioxane were detected at or above 0.2 µg/L. Since most of these connections are complete, drinking water sampling was not conducted during the report period from December 2016 through February 2017. Table 1 lists these homes and provides the status of their connection to the municipal water supply.

Table 2 summarizes the 1,4 dioxane test results from samples collected in the Landfill Study Area since 2013. Figure 1 is a Site Map with each parcel color coded with one of four colors to represent the drinking water test results. Note that the Site Map will be updated in the near future to reflect connections to the MWS and whether private wells have been converted for irrigation use:

- Gray = 1,4-dioxane has not been detected in any sample collected from these properties. Well water test results in this category were below the reporting limit for 1,4-dioxane (approximately 0.15 µg/L). Since an estimated concentration ("J" value) was not reported, it is inferred that 1,4-dioxane is not present above the detection limit (approximately 0.04 µg/L).
- Yellow = 1,4-dioxane has been detected in at least one sample collected from these properties, but at a concentration(s) below the MCP GW-1 Standard/ORSG of 0.3 µg/L. Laboratory results that are below 0.3 µg/L but above the laboratory reporting limit are quantified results, while results below the laboratory reporting limit and above the method detection limit of 0.04 µg/L are qualified as estimated values (reported with a "J" qualifier).
- Red = 1,4-dioxane has been detected in at least one sample collected from these properties at or above 0.3 µg/L. All residents in this category have been offered bottled water and have been advised to not use their well water for consumptive purposes.

- White = well water not tested, most likely because homeowners have not been available during scheduled sampling events.
- White with NR = owners of these properties were contacted by certified mail; however, no response was received or access was not granted.
- White/hatched = no well is present on these properties.

A letter notifying the Town of Eastham Board of Health and Chief Municipal Officer of the electronic submittal of this IRA status report to MassDEP is being sent concurrent with the submittal of this report. A copy of the notification letter is included in Appendix A.

3.0 LANDFILL MONITORING PROGRAM ACTIVITIES

The landfill monitoring program includes routine sampling of private well water (in concert with the IRA) and longer-term activities related to assessing the nature and extent of 1,4 dioxane emanating from the landfill. Previous status reports have provided updates to the assessment activities, including installation and sampling of temporary and permanent monitoring wells, and groundwater flow studies. A significant update to this work is found in the most recent IRA Plan Modification (ES&M, December 22, 2016).

3.1 Landfill Monitoring Well Sample Collection

The following section summarizes the landfill monitoring well samples collected during this report period. A summary of the revised LMP sampling requirements and schedule is shown on Table 3. The locations of these wells within the limits of the landfill are shown on Figure 1. The following samples were collected by Barnstable County Department of Health and Environment (BCDHE) personnel and submitted to Alpha Analytical for analysis:

- On March 1, 2017, BCDHE personnel collected quarterly groundwater samples from landfill monitoring wells MW-3I and MW-3D for analysis of VOCs, 1,4-dioxane, metals and indicator parameters.

Current and historic laboratory results for LMP samples are summarized on Table 4, which includes applicable regulatory standards and/or guidelines. Field logs are included in Appendix B, and the complete laboratory report is included in Appendix C.

3.2 Landfill Soil Gas Monitoring

Personnel from BCDHE conduct soil gas monitoring at the Eastham Landfill semiannually - once during the spring and once in the fall. Soil gas monitoring was not conducted during this report period.

3.3 Private Well Sample Collection

In accordance with the LMP, drinking water samples were collected from seven residences for laboratory testing during previous reporting periods. The laboratory test results from these samples are reported in Table 4 (the 1,4-dioxane results for the residence are also reported on Table 2).

4.0 FUTURE SCHEDULE OF IRA AND LMP ACTIVITIES

During the next reporting period from March through May 2017, the following IRA and LMP activities are planned:

4.1 Immediate Response Action

The most recent IRA Plan Modification (submitted to MassDEP on December 22, 2016) describes assessment and hydrogeologic studies that have been conducted to define the nature and extent of 1,4 dioxane in the drinking water aquifer as well as groundwater flow conditions. The report forms the basis and justification for the Mandatory Municipal Supply Zone, which is the area where connections to the Town's water supply are mandatory. As these connections are made and private wells are either decommissioned or converted to non-potable uses, the IRA will transition towards completion. As of the writing of this report, most homes within the Mandatory Municipal Supply Zone where drinking water exhibited concentrations of 1,4 dioxane at or above 0.2 µg/L have been connected to the municipal water supply. Once the IRA is complete, future groundwater monitoring activities will be conducted under a soon-to-be revised LMP.

4.2 Landfill Monitoring Plan

During the next report period, water samples will be collected as follows:

- Collection of quarterly groundwater samples from wells MW-3I and MW-3D for analysis of indicator parameters, metals and VOCs including 1,4-dioxane.
- Collection of a semi-annual groundwater sample from landfill monitoring well MW-21S for analysis of VOCs and 1,4-dioxane.
- Semi-annual monitoring of landfill gas wells.
- Collection of annual drinking water samples from residential properties (listed on Table 3) that have not been connected to the municipal water supply (at the time of sampling) for metals and VOCs including 1,4-dioxane as described on Section 3.3.

5.0 PUBLIC OUTREACH

Our communication plan continues to include the following elements to keep the public informed of all aspects of this project:

Availability of Reports

All reports required by MassDEP are available on their website (<http://public.dep.state.ma.us/fileviewer/Rtn.aspx?rtn=4-0024301>). The Town of Eastham's also posts these reports on their website (http://www.eastham-ma.gov/Public_Documents/EasthamMA_Health/LandfillFolder/). Hard copies of reports are available at Town Hall and at the Eastham Public Library.

Direct Communications

Questions on the ongoing work related to this matter may be directed to:

- Jane Crowley, Health Agent, Eastham Board of Health
508-240-5900, x229 or by email at jcrowley@eastham-ma.gov
- Doug Heely, Licensed Site Professional, Environmental Strategies & Mgmt.
508-226-1800 or by email at dheely@esm-inc.com

TABLE 1
MWS CONNECTION STATUS OF PROPERTIES WITH 1,4 DIOXANE CONCENTRATIONS AT AND ABOVE 0.3 µg/L
Eastham Landfill Private Well Sampling Program
Eastham, MA

Bottled Water List

50 ALSTON AVENUE	Connected to MWS
225 ALSTON AVENUE	Connected to MWS
255 ALSTON AVENUE	Connected to MWS
275 ALSTON AVENUE	Connected to MWS
285 ALSTON AVENUE	
60 CHIPMAN STREET	Connected to MWS
65 DEEPWOOD DRIVE	
85 DEEPWOOD DRIVE	Connected to MWS
4 ELDIA WAY	Connected to MWS
9 ELDIA WAY	Connected to MWS
11 ELDIA WAY	
13 ELDIA WAY	Connected to MWS
25 KNOWLES STREET	Connected to MWS
30 KNOWLES STREET (A & B)	Connected to MWS
45 KNOWLES STREET	
65 KNOWLES STREET	Connected to MWS
100 MEETINGHOUSE ROAD (A & B)	Connected to MWS
155 MEETINGHOUSE ROAD	
165 MEETINGHOUSE ROAD	Connected to MWS
171 MEETINGHOUSE ROAD REAR (A, B & C)	Connected to MWS
205 MEETINGHOUSE ROAD	Connected to MWS
350 MEETINGHOUSE ROAD	Connected to MWS
370 MEETINGHOUSE ROAD	Connected to MWS
180 OLD ORCHARD ROAD	Connected to MWS
310 OLD ORCHARD ROAD	Connected to MWS
55 SALT POND ROAD	Connected to MWS
325 SCHOOLHOUSE ROAD	Connected to MWS
600 SCHOOLHOUSE ROAD	
35 SHARON CIRCLE	Connected to MWS
5 STARLIGHT LANE	Connected to MWS
30 STARLIGHT LANE	Connected to MWS
35 STARLIGHT LANE	Connected to MWS
40 STARLIGHT LANE	Connected to MWS
45 STARLIGHT LANE	Connected to MWS
3168 STATE HWY	
3172 STATE HWY BACKUP WELL	
3172 STATE HWY PRIMARY WELL	
3200 STATE HWY	
8 WHIDAH LANE	Connected to MWS

Quarterly Sampling List

85 ALSTON AVENUE	Connected to MWS
200 ALSTON AVENUE	Connected to MWS
50 KNOWLES STREET	Connected to MWS
375 MEETINGHOUSE ROAD	Connected to MWS
4 PRESERVATION WAY	Connected to MWS
3280 STATE HWY	
3315 STATE HWY	



TABLE 2
SUMMARY OF
PRIVATE WELL SAMPLING PROGRAM ANALYTICAL RESULTS
1,4 DIOXANE
Residential Drinking Water Wells
Eastham, MA
(All results in ug/l)

Property	Date	Duplicate	1,4 Dioxane
Study Area Samples			
20 ALSTON AVENUE	2/22/2013		0.18J
50 ALSTON AVENUE	3/2/2015		0.278
	3/2/2015	Duplicate	0.264
	4/14/2014		0.218
	4/14/2014	Duplicate	0.210
	9/18/2013		0.37
	7/25/2013		0.18J
	6/27/2013		0.18J
	5/29/2013		0.20
	5/1/2013		0.18J
	3/14/2013		0.20
	3/4/2013		0.23
	3/4/2013		0.23
	2/14/2013		5.1
	2/14/2013	Duplicate	5.0
65 ALSTON AVENUE	3/24/2014		0.0813J
	2/19/2013		0.099J
80 ALSTON AVENUE	3/28/2014		<0.150
	8/27/2013		0.057J
	2/11/2013		<0.20
85 ALSTON AVENUE	10/26/2016		<0.147
	7/21/2016		0.168
	7/21/2016	Duplicate	0.184
	5/13/2016		0.135J
	2/12/2016		0.125J
	11/11/2015		0.130J
	8/12/2015		0.175
	8/12/2015	Duplicate	0.194
	5/13/2015		0.207
	5/13/2015	Duplicate	0.196
	2/13/2015		0.163
	11/20/2014		0.248
	11/20/2014	Duplicate	0.236
5/5/2014		0.236	
5/5/2014	Duplicate	0.210	
2/12/2013		0.20	
100 ALSTON AVENUE	2/11/2013		<0.20
115 ALSTON AVENUE	7/22/2013		0.12J
130 ALSTON AVENUE	2/19/2013		<0.20
135 ALSTON AVENUE	2/11/2013		0.11J
150 ALSTON AVENUE	2/15/2013		<0.20
155 ALSTON AVENUE	2/11/2013		<0.20
185 ALSTON AVENUE	2/14/2013		<0.20

Notes: NS - Not Sampled
J - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B - Analyte detected in Blank and Sample
L - LCS or LCSD exceeded the control limits. Results may be biased high.
GW-1 Standard and ORSG for 1,4 dioxane is 0.3 ug/L

3/15/2017 Page 1 of 16
Report: Dioxane all area report
Datebase: 2016 Eastham New



Property	Date	Duplicate	1,4 Dioxane
200 ALSTON AVENUE	7/21/2016		<0.144
	5/9/2014		<0.144
	12/2/2013		0.15J
	5/1/2013		0.21
215 ALSTON AVENUE	7/31/2014		<0.144
	2/12/2013		<0.20
225 ALSTON AVENUE	5/6/2014		0.350
	5/6/2014	Duplicate	0.365
	4/29/2013		1.2
235 ALSTON AVENUE	8/5/2014		<0.142
	7/31/2013		<0.20
255 ALSTON AVENUE	Inf 2/13/2015		2.14
	Inf 1/23/2015		2.13
	Inf 11/19/2014		2.27
	Inf 8/3/2014		2.03
	Inf 6/19/2014		2.12
	8/27/2013		1.8
	5/6/2013		1.8
	5/6/2013	Duplicate	1.5
	2/14/2013		1.9
	2/14/2013	Duplicate	1.8
265 ALSTON AVENUE	5/12/2016		<0.147
	4/1/2015		<0.148
	3/28/2014		<0.139
	12/18/2013		<0.20
	3/14/2013		0.055J
270 ALSTON AVENUE	8/4/2014		<0.142
	2/11/2013		<0.20
275 ALSTON AVENUE	7/17/2014		1.28
	7/17/2014	Duplicate	1.35
	5/16/2013		1.3
	5/16/2013	Duplicate	0.99
280 ALSTON AVENUE	5/12/2016		<0.147
	5/13/2015		<0.156
	12/17/2014		<0.142
	12/18/2013		<0.20
	2/22/2013		<0.20
285 ALSTON AVENUE	9/18/2014		0.416
	3/14/2014		0.636
	11/20/2013		0.51
	5/8/2013		0.35
	2/22/2013		0.37
	2/22/2013	Duplicate	0.33
10 ALSTON COURT	2/14/2013		<0.20
60 ARMOUR DRIVE	10/26/2016		<0.147
80 ARMOUR DRIVE	10/26/2016		<0.147
ATLANTIC OAKS 'H' WELL	7/21/2016		0.0778J
	7/25/2013		<0.20
ATLANTIC OAKS NORTH WELL	7/21/2016		<0.156
	7/25/2013		<0.20
ATLANTIC OAKS-SOUTH WELL	7/21/2016		<0.147
	7/23/2013		<0.20

Notes: NS - Not Sampled
J - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B - Analyte detected in Blank and Sample
L - LCS or LCSD exceeded the control limits. Results may be biased high.
GW-1 Standard and ORSG for 1,4 dioxane is 0.3 ug/L

3/15/2017 Page 2 of 16
Report: Dioxane all area report
Database: 2016 Eastham New



Property	Date	Duplicate	1,4 Dioxane	
5 BAYVIEW AVENUE	8/1/2014		<0.147	
	2/25/2013		<0.20	
20 CANDLEWOOD DRIVE	5/29/2013		0.056J	
50 CANDLEWOOD DRIVE	5/3/2013		0.092J	
55 CANDLEWOOD DRIVE	7/25/2013		<0.20	
70 CANDLEWOOD DRIVE	5/3/2013		0.073J	
75 CANDLEWOOD DRIVE	7/17/2014		<0.147	
100 CANDLEWOOD DRIVE	5/3/2013		<0.20	
145 CANDLEWOOD DRIVE	5/2/2013		<0.20	
150 CANDLEWOOD DRIVE	5/2/2013		<0.20	
170 CANDLEWOOD DRIVE	7/25/2013		<0.20	
200 CANDLEWOOD DRIVE	5/8/2013		<0.20	
250 CANDLEWOOD DRIVE	5/7/2013		<0.20	
280 CANDLEWOOD DRIVE	5/6/2013		<0.20	
310 CANDLEWOOD DRIVE	9/19/2014		<0.15	
	4/30/2013		0.060J	
375 CANDLEWOOD DRIVE	12/14/2016		<0.147	Irrigation Well Test
380 CANDLEWOOD DRIVE	12/14/2016		<0.147	
385 CANDLEWOOD DRIVE	12/14/2016		<0.147	
395 CANDLEWOOD DRIVE	5/8/2013		<0.20	
10 CESTARO WAY	4/30/2013		0.11J	
20 CESTARO WAY	5/2/2013		<0.20	
25 CESTARO WAY	12/3/2013		<0.20	
35 CESTARO WAY	4/30/2013		<0.20	
45 CESTARO WAY	5/2/2013		<0.20	
50 CESTARO WAY	5/6/2013		0.077J	
55 CESTARO WAY	5/2/2013		<0.20	
75 CESTARO WAY	5/6/2013		<0.20	
80 CESTARO WAY	2/21/2013		0.061J	
85 CESTARO WAY	12/3/2013		<0.20	
90 CESTARO WAY	5/2/2013		<0.20	
10 CHATHAM STREET	10/6/2015		<0.150	
15 CHATHAM STREET	12/15/2016		<0.15	Irrigation Well Test
55 CHESTER AVENUE	1/30/2015		<0.144	
65 CHESTER AVENUE	12/15/2016		0.190	Irrigation Well Test
100 CHESTER AVENUE	12/15/2016		<0.153	
115 CHESTER AVENUE	10/5/2015		0.114J	
120 CHESTER AVENUE	12/15/2016		<0.147	Irrigation Well Test
20 CHIPMAN STREET	7/25/2013		0.041J	
30 CHIPMAN STREET	3/27/2014		0.0969J	
	2/11/2013		0.14J	
40 CHIPMAN STREET	6/26/2014		<0.139	
	7/31/2013		0.046J	
60 CHIPMAN STREET	5/8/2014		0.382	
	5/8/2014	Duplicate	0.341	
	12/6/2013		0.27	
	12/6/2013	Duplicate	0.30	
40 CHIPMAN STREET	4/30/2013		0.29	
	2/15/2013		0.047J	
25 CHOKEBERRY DRIVE	12/2/2013		0.15J	
30 CHOKEBERRY DRIVE	5/7/2013		0.17J	
35 CHOKEBERRY DRIVE	5/3/2013		0.050J	
40 CHOKEBERRY DRIVE	5/2/2013		0.069J	
45 CHOKEBERRY DRIVE	5/16/2013		0.11J	

Notes: NS - Not Sampled
J - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B - Analyte detected in Blank and Sample
L - LCS or LCSD exceeded the control limits. Results may be biased high.
GW-1 Standard and ORSG for 1,4 dioxane is 0.3 ug/L

3/15/2017 Page 3 of 16
Report: Dioxane all area report
Database: 2016 Eastham New



Property	Date	Duplicate	1,4 Dioxane
50 CHOKEBERRY DRIVE	5/10/2013		0.058J
60 CHOKEBERRY DRIVE	4/11/2014		<0.142
10 DEEPWOOD DR	1/30/2015		<0.142
15 DEEPWOOD DRIVE	9/17/2013		0.051J
20 DEEPWOOD DRIVE	5/29/2015		<0.147
25 DEEPWOOD DRIVE	2/12/2016		<0.147
	11/11/2015		<0.150
	7/30/2013		0.073J
30 DEEPWOOD DRIVE	7/31/2013		0.040J
40 DEEPWOOD DRIVE	7/24/2013		<0.20
45 DEEPWOOD DRIVE	7/24/2013		<0.20
50 DEEPWOOD DRIVE	1/23/2015		<0.150
	12/3/2013		<0.20
55 DEEPWOOD DRIVE	8/25/2014		<0.139
	7/25/2013		<0.20
65 DEEPWOOD DRIVE	3/17/2015		0.481
	3/28/2014		0.297
	3/28/2014	Duplicate	0.336
	7/30/2013		0.29
	7/30/2013	Duplicate	0.24
70 DEEPWOOD DRIVE	7/30/2013		0.073J
75 DEEPWOOD DRIVE	8/1/2014		<0.144
	7/30/2013		<0.20
85 DEEPWOOD DRIVE	9/17/2013		0.63
95 DEEPWOOD DRIVE	3/17/2015		<0.158
	12/3/2013		<0.20
10 DEERFIELD LANE	5/1/2013		0.052J
15 DEERFIELD LANE	4/30/2013		<0.20
20 DEERFIELD LANE	5/8/2013		<0.20
30 DEERFIELD LANE	7/22/2013		<0.20
35 DEERFIELD LANE	2/25/2013		<0.20
40 DEERFIELD LANE	5/1/2013		<0.20
45 DEERFIELD LANE	5/2/2013		<0.20
50 DEERFIELD LANE	5/3/2013		<0.20
55 DEERFIELD LANE	4/29/2013		0.062J
60 DEERFIELD LANE	5/6/2013		<0.20
65 DEERFIELD LANE	5/6/2013		<0.20
70 DEERFIELD LANE	5/8/2013		0.048J
75 DEERFIELD LANE	7/25/2013		<0.20
80 DEERFIELD LANE	5/1/2013		<0.20
105 DEERFIELD LANE	5/8/2013		0.067J
DPW GARAGE	2/7/2014		<0.20
GATEHOUSE AT TRANSFER STATION	2/11/2014		<0.20
DPW NON-POTABLE WELL	2/25/2013		<0.20
20 DUCKMARSH LANE	4/30/2013		<0.20
25 DUCKMARSH LANE	5/2/2013		<0.20
35 DUCK MARSH LANE	12/6/2013		<0.20
2 ELDIA WAY	8/4/2014		<0.142
	8/2/2013		<0.20
3 ELDIA WAY	5/3/2013		<0.20
4 ELDIA WAY	8/4/2014		<0.144
	5/7/2014		0.451
	5/7/2014	Duplicate	0.449
	5/8/2013		0.089J

Notes: NS - Not Sampled
J - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B - Analyte detected in Blank and Sample
L - LCS or LCSD exceeded the control limits. Results may be biased high.
GW-1 Standard and ORSG for 1,4 dioxane is 0.3 ug/L

3/15/2017 Page 4 of 16
Report: Dioxane all area report
Database: 2016 Eastham New



Property	Date	Duplicate	1,4 Dioxane	
5 ELDIA WAY	1/23/2015		<0.163	
	4/30/2013		<0.20	
6 ELDIA WAY	5/9/2014		<0.144	
	12/5/2013		0.15J	
7 ELDIA WAY	3/24/2014		<0.150	
	5/10/2013		0.045J	
8 ELDIA WAY	12/5/2013		<0.20	
9 ELDIA WAY	5/6/2014		0.309	
	5/6/2014	Duplicate	0.284	
	12/5/2013		0.31	
	12/5/2013	Duplicate	0.27	
11 ELDIA WAY	5/2/2013		0.25	
	5/7/2014		3.58	
	5/7/2014	Duplicate	3.61	
	9/17/2013		3.7	
	7/25/2013		3.0	
	6/27/2013		4.3	
	6/27/2013	Duplicate	3.4	
	5/29/2013		4.3	
	5/29/2013	Duplicate	3.9B	
	4/29/2013		4.2	
	4/29/2013	Duplicate	3.3	
13 ELDIA WAY	3/14/2013		2.9	
	3/14/2013	Duplicate	3.1	
	5/9/2014		0.660	
	5/9/2014	Duplicate	0.659	
	7/24/2013		0.33	
17 ELDIA WAY	5/6/2013		<0.20	
21 ELDIA WAY	12/5/2013		<0.20	
3 FAIRVIEW AVENUE	5/10/2013		<0.20	
4 FAIRVIEW AVENUE	8/15/2014		<0.147	
	4/29/2013		<0.20	
5 FAIRVIEW AVENUE	5/8/2014		<0.144	
	2/14/2013		0.047J	
20 FAIRVIEW AVENUE	5/7/2013		0.093J	
25 FAIRVIEW AVENUE	5/7/2013		0.041J	
30 FAIRVIEW AVENUE	12/3/2013		0.063J	
35 FAIRVIEW AVENUE	5/2/2013		<0.20	
40 FAIRVIEW AVENUE	5/16/2013		0.065J	
50 FAIRVIEW AVENUE	5/2/2013		<0.20	
60 FAIRVIEW AVENUE	5/1/2013		0.041J	
115 FAIRVIEW AVENUE	7/22/2013		<0.20	
35 FORREST AVENUE	12/16/2016		<0.147	Irrigation Well Test
15 GLACIER HILLS ROAD	3/13/2014		<0.139	
20 GLACIER HILLS ROAD	5/6/2014		<0.144	
	2/22/2013		0.071J	
70 GLACIER HILLS ROAD	8/4/2014		<0.142	
	7/22/2013		<0.20	
75 GLACIER HILLS ROAD	6/17/2014		<0.142	
100 GLACIER HILLS ROAD	5/8/2013		0.058J	
115 GLACIER HILLS ROAD	4/14/2014		<0.144	
130 GLACIER HILLS ROAD	7/23/2013		<0.20	
145 GLACIER HILLS ROAD	4/14/2014		<0.144	
150 GLACIER HILLS ROAD	7/24/2013		<0.20	

Notes: NS - Not Sampled
J - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B - Analyte detected in Blank and Sample
L - LCS or LCSD exceeded the control limits. Results may be biased high.
GW-1 Standard and ORSG for 1,4 dioxane is 0.3 ug/L

3/15/2017 Page 5 of 16
Report: Dioxane all area report
Database: 2016 Eastham New



Property	Date	Duplicate	1,4 Dioxane
165 GLACIER HILLS ROAD	3/13/2014		<0.139
175 GLACIER HILLS ROAD	3/14/2014		<0.139
180 GLACIER HILLS ROAD	8/25/2014		<0.142
	8/2/2013		<0.20
200 GLACIER HILLS ROAD	8/5/2014		<0.144
	7/31/2013		<0.20
205 GLACIER HILLS ROAD	3/14/2014		<0.139
230 GLACIER HILLS ROAD	7/25/2013		<0.20
270 GLACIER HILLS ROAD	3/11/2014		<0.150
300 GLACIER HILLS ROAD	7/31/2013		0.077J
310 GLACIER HILLS ROAD	7/25/2013		<0.20
350 GLACIER HILLS ROAD	10/9/2015		<0.142
380 GLACIER HILLS ROAD	10/9/2015		<0.147
395 GLACIER HILLS ROAD	10/6/2015		<0.153
20 JASON DRIVE	3/12/2014		<0.150
25 JASON DRIVE	4/14/2014		<0.147
30 JASON DRIVE	3/10/2014		<0.147
20 KINGSBURY BEACH ROAD	7/21/2016		0.0819J
80 KINGSBURY BEACH ROAD	10/5/2016		<0.147
100 KINGSBURY BEACH ROAD	10/5/2016		<0.147
15 KNOWLES STREET	5/13/2015		<0.147
	4/26/2013		0.078J
25 KNOWLES STREET	5/8/2014		3.72
	5/8/2014	Duplicate	3.58
	9/18/2013		4.3
	8/27/2013		3.2
	7/25/2013		2.8
	6/27/2013		2.8
	6/27/2013	Duplicate	3.0
	5/29/2013		2.7
	5/29/2013	Duplicate	2.8B
	4/26/2013		2.8
	4/26/2013	Duplicate	2.6
	2/21/2013		3.1
	2/21/2013	Duplicate	2.9
30 KNOWLES STREET	5/6/2014		4.79
	5/6/2014	Duplicate	4.92
	9/17/2013		5.4
	8/28/2013		5.6
	7/30/2013		5.1
	7/30/2013	Duplicate	5.1
	6/27/2013		5.0
	6/27/2013	Duplicate	5.1
	5/29/2013		4.9
	5/29/2013	Duplicate	5.9B
	4/29/2013		6.0
	4/29/2013	Duplicate	5.2
	2/19/2013		6.9
	2/19/2013	Duplicate	6.4
45 KNOWLES STREET	5/6/2014		2.22
	5/6/2014	Duplicate	2.38
	8/28/2013		2.0
	5/1/2013		2.3
	5/1/2013	Duplicate	2.4

Notes: NS - Not Sampled
J - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B - Analyte detected in Blank and Sample
L - LCS or LCSD exceeded the control limits. Results may be biased high.
GW-1 Standard and ORSG for 1,4 dioxane is 0.3 ug/L

3/15/2017 Page 6 of 16
Report: Dioxane all area report
Database: 2016 Eastham New



Property	Date	Duplicate	1,4 Dioxane
50 KNOWLES STREET	7/21/2016		0.0809J
	11/11/2015		<0.144
	8/12/2015		<0.144
	8/12/2015	Duplicate	<0.144
	2/16/2015		0.195
	6/19/2014		0.0910J
	4/14/2014		<0.144
	2/19/2013		0.26
	2/19/2013	Duplicate	0.23
	60 KNOWLES STREET	3/2/2015	
3/2/2015		Duplicate	<0.152
12/4/2013			0.049J
2/21/2013			0.063J
65 KNOWLES STREET	10/28/2014		0.102J
	6/16/2014		0.209
	6/16/2014	Duplicate	0.217
	3/27/2014		5.03
	3/27/2014	Duplicate	5.42
70 KNOWLES STREET	7/23/2013		0.11J
	6/16/2014		<0.147
	2/20/2013		0.057J
75 KNOWLES STREET	5/8/2014		<0.144
	4/30/2013		0.075J
80 KNOWLES STREET	8/12/2015		<0.144
	8/12/2015	Duplicate	<0.144
	10/26/2016		<0.147
130 LOCUST ROAD	10/26/2016		<0.147
180 LOCUST ROAD	10/26/2016		<0.147
230 LOCUST ROAD	10/5/2016		<0.147
100 MEETINGHOUSE ROAD	9/19/2014		1.75
	5/6/2014		1.90
	3/14/2014		1.73
	11/20/2013		1.3
	8/27/2013		1.9
	5/8/2013		1.8
	5/8/2013	Duplicate	1.7
	2/14/2013		1.6
	2/14/2013	Duplicate	1.5
	125 MEETINGHOUSE ROAD	7/21/2016	
7/21/2016		Duplicate	0.111J
5/8/2013			0.15J
140 MEETINGHOUSE ROAD	3/24/2014		<0.150
	5/10/2013		0.11J
150 MEETINGHOUSE ROAD	2/22/2013		<0.20
155 MEETINGHOUSE ROAD	8/15/2014		0.379
	8/15/2014	Duplicate	0.36
	7/31/2013		0.46
	7/31/2013	Duplicate	0.35
160 MEETINGHOUSE ROAD	2/12/2013		<0.20
165 MEETINGHOUSE ROAD	5/9/2014		0.746
	5/9/2014	Duplicate	0.748
	2/15/2013		0.75
	2/15/2013	Duplicate	0.67

Notes: NS - Not Sampled
J - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B - Analyte detected in Blank and Sample
L - LCS or LCSD exceeded the control limits. Results may be biased high.
GW-1 Standard and ORSG for 1,4 dioxane is 0.3 ug/L



Property	Date	Duplicate	1,4 Dioxane	
170 MEETINGHOUSE ROAD	5/12/2016		<0.147	
	5/13/2015		<0.144	
	8/15/2014		<0.144	
	2/15/2013		<0.20	
171 MEETINGHOUSE ROAD REAR	5/1/2013		0.58	
175 MEETINGHOUSE ROAD	9/19/2014		<0.156	
	5/2/2013		<0.20	
180 MEETINGHOUSE ROAD	5/1/2013		<0.20	
185 MEETINGHOUSE ROAD	3/27/2014		<0.139	
	4/30/2013		0.081J	
190 MEETINGHOUSE ROAD REAR	5/9/2014		<0.142	
200 MEETINGHOUSE ROAD	7/23/2014		<0.147	
	5/3/2013		0.093J	
205 MEETINGHOUSE ROAD	5/5/2014		0.310	
	5/5/2014	Duplicate	0.319	
	12/3/2013		0.30	
	12/3/2013	Duplicate	0.26	
225 MEETINGHOUSE ROAD	5/9/2014		0.196	
	5/9/2014	Duplicate	0.178	
	5/10/2013		0.13J	
255 MEETINGHOUSE ROAD	4/26/2013		0.065J	
270 MEETINGHOUSE ROAD	2/16/2015		<0.146	
275 MEETINGHOUSE ROAD	8/1/2014		<0.144	
	7/23/2013		<0.20	
310 MEETINGHOUSE ROAD	8/12/2015		0.103J	
	8/12/2015	Duplicate	0.113J	
350 MEETINGHOUSE ROAD	5/5/2014		1.23	
	5/5/2014	Duplicate	1.24	
	7/25/2013		1.3	
	7/25/2013	Duplicate	1.2	
355 MEETINGHOUSE ROAD	12/5/2013		<0.20	
370 MEETINGHOUSE ROAD	5/8/2014		0.339	
	5/8/2014	Duplicate	0.316	
	4/30/2013		0.19J	
375 MEETINGHOUSE ROAD	2/12/2016		0.133J	
	11/11/2015		0.138J	
	4/1/2015		0.114J	
	11/20/2014		0.212	
	11/20/2014	Duplicate	0.187	
	3/24/2014		0.175	
	3/24/2014	Duplicate	0.156	
	8/2/2013		0.19J	
385 MEETINGHOUSE ROAD	8/1/2014		<0.142	
	7/24/2013		0.040J	
400 MEETINGHOUSE ROAD	7/24/2013		0.12J	
415 MEETINGHOUSE ROAD	12/3/2013		0.14J	
440 MEETINGHOUSE ROAD	7/31/2013		<0.20	
20 MOLLS POND ROAD	2/19/2013		0.050J	
30 MOLLS POND ROAD	2/15/2013		<0.20	
50 MOLLS POND ROAD	2/11/2013		<0.20	
60 MOLLS POND ROAD	2/11/2013		<0.20	
855 NAUSET ROAD	12/14/2016		<0.150	Irrigation Well Test
1075 NAUSET ROAD	12/14/2016		<0.147	
1255 NAUSET ROAD	12/16/2016		<0.156	

Notes: NS - Not Sampled
J - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B - Analyte detected in Blank and Sample
L - LCS or LCSD exceeded the control limits. Results may be biased high.
GW-1 Standard and ORSG for 1,4 dioxane is 0.3 ug/L

3/15/2017 Page 8 of 16
Report: Dioxane all area report
Database: 2016 Eastham New



Property	Date	Duplicate	1,4 Dioxane
1525 NAUSET ROAD	3/10/2014		<0.153
400 NAUSET ROAD-SALT PND VIS CTR	8/12/2014		<0.144
	12/2/2013		<0.20
265 NORTH SUNKEN MEADOW ROAD	3/13/2014		<0.139
55 NORTHWOOD ROAD	8/2/2013		0.15J
25 OLD ORCHARD ROAD	5/6/2013		0.064J
45 OLD ORCHARD ROAD	3/17/2015		<0.167
	2/22/2013		<0.20
75 OLD ORCHARD ROAD	5/12/2016		0.100J
	8/15/2014		<0.150
	2/21/2013		0.17J
80 OLD ORCHARD ROAD	7/31/2014		<0.144
	2/12/2013		<0.20
100 OLD ORCHARD ROAD	7/31/2014		<0.144
	2/12/2013		<0.20
130A OLD ORCHARD ROAD	5/29/2015		<0.153
	12/17/2014		<0.142
	12/18/2013		<0.20
	2/25/2013		<0.20
130B OLD ORCHARD ROAD	5/13/2016		<0.142
	5/29/2015		<0.147
	12/17/2014		<0.142
	12/18/2013		<0.20
	2/25/2013		<0.20
180 OLD ORCHARD ROAD	9/18/2014		0.137J
	5/6/2014		0.527
	3/14/2014		0.0953J
	11/20/2013		0.17J
	8/28/2013		0.46
	6/27/2013		0.45
	5/8/2013		0.52
	2/22/2013		0.045J
210 OLD ORCHARD ROAD	5/13/2016		<0.144
	12/18/2013		<0.20
	2/15/2013		<0.20
290 OLD ORCHARD ROAD	5/12/2016		<0.147
	Effluent 3/2/2015		<0.144
	Untreated 3/2/2015		<0.156
	7/23/2014		<0.144
	5/16/2013		0.068J
	2/15/2013		<0.20
310 OLD ORCHARD ROAD	5/6/2014		0.431
	5/6/2014 Duplicate		0.433
	4/29/2013		0.41
350 OLD ORCHARD ROAD	8/1/2014		<0.142
	5/3/2013		<0.20
370 OLD ORCHARD ROAD	5/2/2013		<0.20
390 OLD ORCHARD ROAD	5/7/2013		<0.20
400 OLD ORCHARD ROAD	5/7/2013		<0.20
50 PIPER LANE	2/20/2013		<0.20
65 PIPER LANE	7/31/2013		<0.20

Notes: NS - Not Sampled
J - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B - Analyte detected in Blank and Sample
L - LCS or LCSD exceeded the control limits. Results may be biased high.
GW-1 Standard and ORSG for 1,4 dioxane is 0.3 ug/L

3/15/2017 Page 9 of 16
Report: Dioxane all area report
Database: 2016 Eastham New



Property	Date	Duplicate	1,4 Dioxane
1 PRESERVATION WAY	8/25/2014		0.174
	8/25/2014	Duplicate	0.199
	12/2/2013		0.19J
4 PRESERVATION WAY	10/26/2016		0.198
	10/26/2016	Duplicate	0.217
	7/21/2016		0.248
	7/21/2016	Duplicate	0.173
	5/13/2016		0.197
	5/13/2016	Duplicate	0.21
	2/12/2016		0.209
	2/12/2016	Duplicate	0.208
	11/11/2015		0.204
	11/11/2015	Duplicate	0.165
	8/12/2015		0.211
	8/12/2015	Duplicate	0.222
	4/1/2015		0.183
	4/1/2015	Duplicate	0.207
	10/28/2014		0.208
	7/17/2014		0.192
7/17/2014	Duplicate	0.217	
3/25/2014		0.208	
3/25/2014	Duplicate	0.196	
	12/3/2013		0.18J
	4/30/2013		0.21
6 PRESERVATION WAY	12/2/2013		0.11J
8 PRESERVATION WAY	12/2/2013		0.13J
20 REDBERRY LANE	7/23/2013		0.046J
35 REDBERRY LANE	12/2/2013		0.070J
45 REDBERRY LANE	3/28/2014		0.105J
55 REDBERRY LANE	7/22/2013		0.047J
25 SALT POND ROAD	10/5/2016		<0.147
35 SALT POND ROAD	10/5/2016		<0.147
45 SALT POND ROAD	7/21/2016		0.195
	7/21/2016	Duplicate	0.188
49 SALT POND ROAD	3/11/2014		0.177
	3/11/2014	Duplicate	0.166
55 SALT POND ROAD	9/1/2016		0.681
	7/21/2016		0.596
25 SCHOOLHOUSE ROAD	3/10/2014		<0.150
55 SCHOOLHOUSE ROAD	12/4/2013		0.044J
85 SCHOOLHOUSE ROAD	12/5/2013		<0.20
90 SCHOOLHOUSE ROAD	6/23/2014		<0.139
100 SCHOOLHOUSE ROAD	12/15/2016		<0.147
1000 SCHOOLHOUSE ROAD	7/23/2014		<0.144
180 SCHOOLHOUSE ROAD	7/23/2013		0.093J

Irrigation Well Test

Notes: NS - Not Sampled
J - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B - Analyte detected in Blank and Sample
L - LCS or LCSD exceeded the control limits. Results may be biased high.
GW-1 Standard and ORSG for 1,4 dioxane is 0.3 ug/L

3/15/2017 Page 10 of 16
Report: Dioxane all area report
Database: 2016 Eastham New



Property	Date	Duplicate	1,4 Dioxane	
200 SCHOOLHOUSE ROAD	7/21/2016		0.0799J	
	5/13/2016		<0.144	
	2/12/2016		0.0763J	
	11/18/2015		<0.142	
	8/12/2015		0.0961J	
	8/12/2015	Duplicate	0.106J	
	5/13/2015		0.100J	
	2/13/2015		0.0892J	
	11/20/2014		0.0884J	
	11/20/2014	Duplicate	0.0808J	
	8/4/2014		0.0822J	
	PRE (filter)	5/6/2014		0.105J
	POST (filter)	2/14/2014		0.094J
	PRE (filter)	2/14/2014		0.083J
	PRE (filter)	2/14/2014	Duplicate	0.076J
	PRE (filter)	2/11/2014		0.081J
	POST (filter)	2/11/2014		0.096J
	PRE (filter)	2/11/2014	Duplicate	0.086J
	210 SCHOOLHOUSE ROAD	2/12/2013		<0.20
5/6/2013			<0.20	
230 SCHOOLHOUSE ROAD	5/8/2013		<0.20	
255 SCHOOLHOUSE ROAD	7/22/2013		0.055J	
265 SCHOOLHOUSE ROAD	7/23/2014		0.0945J	
	2/21/2013		0.053J	
280 SCHOOLHOUSE ROAD	2/22/2013		0.071J	
300 SCHOOLHOUSE ROAD	5/7/2014		0.168	
	5/7/2014	Duplicate	0.177	
	2/19/2013		0.14J	

Notes: NS - Not Sampled
J - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B - Analyte detected in Blank and Sample
L - LCS or LCSD exceeded the control limits. Results may be biased high.
GW-1 Standard and ORSG for 1,4 dioxane is 0.3 ug/L

3/15/2017 Page 11 of 16
Report: Dioxane all area report
Datebase: 2016 Eastham New



Property		Date	Duplicate	1,4 Dioxane
325 SCHOOLHOUSE ROAD	Effluent	9/19/2013		0.68
	Untreated	9/19/2013		10
	Mid System	9/19/2013		0.095J
	Mid System	8/27/2013		<0.20
	Effluent	8/27/2013		<0.20
	Untreated	8/27/2013		7.7
	Untreated	7/31/2013		9.4
	Mid System	7/31/2013		<0.20
	Effluent	7/31/2013		<0.20
	Untreated	7/31/2013	Duplicate	8.8
	Mid System	6/27/2013		0.041J
	Untreated	6/27/2013		8.2
	Effluent	6/27/2013		<0.20
	Untreated	6/27/2013	Duplicate	8.8
	Untreated	5/29/2013		7.8
	Effluent	5/29/2013		<0.20
	Mid System	5/29/2013		<0.20
	Untreated	5/29/2013	Duplicate	9.8B
	Untreated	4/29/2013		9.8
	Mid System	4/29/2013		<0.20
	Effluent	4/29/2013		<0.20
	Untreated	4/29/2013	Duplicate	8.3
	Mid System	3/21/2013		<0.20
	Effluent	3/21/2013		<0.20
	Effluent	3/14/2013		<0.20
	Mid System	3/14/2013		<0.20
	Effluent	3/8/2013		<0.20
	Mid System	3/8/2013		<0.20
	Effluent	2/25/2013		<0.20
	Mid System	2/25/2013		<0.20
	Untreated	2/22/2013		10
	Untreated	2/22/2013	Duplicate	9.7
345 SCHOOLHOUSE ROAD		5/7/2014		<0.153
		2/12/2013		0.12J
350 SCHOOLHOUSE ROAD		8/2/2013		<0.20
390 SCHOOLHOUSE ROAD		5/7/2013		<0.20
395 SCHOOLHOUSE ROAD		9/19/2013		<0.20
400 SCHOOLHOUSE ROAD		5/16/2013		<0.20
415 SCHOOLHOUSE ROAD		1/23/2015		<0.144
		8/5/2014		0.0895J
		2/25/2013		<0.20
418 SCHOOLHOUSE ROAD		5/2/2013		<0.20
425 SCHOOLHOUSE ROAD		2/25/2013		<0.20
455 SCHOOLHOUSE ROAD		5/6/2013		<0.20
475 SCHOOLHOUSE ROAD		12/6/2013		<0.20
495 SCHOOLHOUSE ROAD		12/6/2013		<0.20
555 SCHOOLHOUSE ROAD		5/29/2013		0.048J
560 SCHOOLHOUSE ROAD		10/5/2015		<0.142
590 SCHOOLHOUSE ROAD		5/13/2015		0.107J

Notes: NS - Not Sampled
J - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B - Analyte detected in Blank and Sample
L - LCS or LCSD exceeded the control limits. Results may be biased high.
GW-1 Standard and ORSG for 1,4 dioxane is 0.3 ug/L

3/15/2017 Page 12 of 16
Report: Dioxane all area report
Database: 2016 Eastham New



Property	Date	Duplicate	1,4 Dioxane	
600 SCHOOLHOUSE ROAD	10/28/2014		0.347	
	6/26/2014		0.226	
	6/26/2014	Duplicate	0.206	
690 SCHOOLHOUSE ROAD	3/11/2014		0.105J	
720 SCHOOLHOUSE ROAD	10/5/2015		0.117J	
725 SCHOOLHOUSE ROAD	2/16/2015		<0.146	
825 SCHOOLHOUSE ROAD	10/9/2015		<0.153	
835 SCHOOLHOUSE ROAD	10/6/2015		0.132J	
850 SCHOOLHOUSE ROAD	10/5/2015		0.0758J	
875 SCHOOLHOUSE ROAD	10/5/2015		<0.147	
915 SCHOOLHOUSE ROAD	10/6/2015		<0.142	
5 SEASIDE DRIVE	12/14/2016		<0.150	Irrigation Well Test
25 SEASIDE DRIVE	12/16/2016		<0.147	
3 SELAH CIRCLE	4/30/2013		0.072J	
4 SELAH CIRCLE	5/6/2014		<0.143	
	9/18/2013		0.065J	
3 SHARON CIRCLE	7/31/2013		0.064J	
5 SHARON CIRCLE	5/3/2013		<0.20	
10 SHARON CIRCLE	5/16/2013		0.088J	
20 SHARON CIRCLE	3/24/2014		0.104J	
	4/30/2013		0.10J	
25 SHARON CIRCLE	9/19/2014		<0.15	
	9/19/2013		<0.20	
35 SHARON CIRCLE	6/19/2014		0.143	
	6/19/2014	Duplicate	0.154	
	5/1/2013		0.34	
10 SPINNAKER WAY	8/25/2014		<0.142	
20 SPINNAKER WAY	11/18/2015		<0.147	
30 SPINNAKER WAY	10/6/2015		<0.142	
40 SPINNAKER WAY	10/9/2015		<0.147	
60 SPINNAKER WAY	10/9/2015		<0.142	
10 SPLIT RAIL ROAD	10/5/2016		<0.147	
15 SPLIT RAIL ROAD	10/26/2016		<0.147	
20 SPLIT RAIL ROAD	10/26/2016		<0.147	
25 SPLIT RAIL ROAD	10/26/2016		<0.144	
30 SPLIT RAIL ROAD	10/26/2016		<0.156	
5 STARLIGHT LANE	5/5/2014		0.394	
	5/5/2014	Duplicate	0.362	
	2/21/2013		0.37	
	2/21/2013	Duplicate	0.37	
10 STARLIGHT LANE	8/4/2014		<0.144	
	5/10/2013		<0.20	
13 STARLIGHT LANE	8/1/2014		<0.142	
	5/10/2013		<0.20	
20 STARLIGHT LANE	1/30/2015		0.164	
	1/30/2015	Duplicate	0.171	
	5/7/2013		<0.20	
30 STARLIGHT LANE	6/26/2014		0.279	
	6/26/2014	Duplicate	0.302	
	3/25/2014		0.278	
	3/25/2014	Duplicate	0.249	
	12/4/2013		0.22	
	12/4/2013	Duplicate	0.17J	
	5/3/2013		0.21	

Notes: NS - Not Sampled
J - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B - Analyte detected in Blank and Sample
L - LCS or LCSD exceeded the control limits. Results may be biased high.
GW-1 Standard and ORSG for 1,4 dioxane is 0.3 ug/L



Property	Date	Duplicate	1,4 Dioxane	
35 STARLIGHT LANE	4/1/2015		0.315	
	12/4/2013		0.37	
	12/4/2013	Duplicate	0.30	
	2/15/2013		0.26	
40 STARLIGHT LANE	6/26/2014		0.874	
	6/26/2014	Duplicate	0.936	
	7/23/2013		0.83	
45 STARLIGHT LANE	3/2/2015		1.21	
	3/2/2015	Duplicate	1.29	
	2/12/2013		1.1	
	2/12/2013	Duplicate	0.93	
50 STARLIGHT LANE	3/27/2014		<0.139	
	7/31/2013		0.13J	
3070 STATE HWY	12/6/2013		0.18J	
3100 A STATE HWY	10/28/2014		<0.150	
	3/13/2014		<0.139	
3168 STATE HWY	3/17/2015		0.398	
	5/5/2014		0.334	
	5/5/2014	Duplicate	0.350	
	12/6/2013		0.33	
	12/6/2013	Duplicate	0.27	
3172 STATE HWY BACKUP WELL	3/25/2014		0.335	
	3/25/2014	Duplicate	0.338	
3172 STATE HWY PRIMARY WELL	3/17/2015		0.345	
	3/25/2014		0.326	
	3/25/2014	Duplicate	0.306	
	12/6/2013		0.20	
	12/6/2013	Duplicate	0.21	
3200 STATE HWY	5/8/2014		0.424	
	5/8/2014	Duplicate	0.418	
	12/6/2013		0.31	
	12/6/2013	Duplicate	0.32	
3265 STATE HWY	3/10/2014		<0.147	
3280 STATE HWY	4/14/2014		0.248	
	4/14/2014	Duplicate	0.198	
3315 STATE HWY	3/12/2014		0.232	
	3/12/2014	Duplicate	0.194	
3430 STATE HWY	12/2/2013		<0.20	
3440 STATE HWY	4/11/2014		<0.142	
3460 STATE HWY	12/6/2013		0.14J	
	4/30/2013		0.10J	
3580 STATE HWY	10/26/2016		<0.147	
30 SURREY DRIVE	9/17/2013		0.14J	
35 SURREY DRIVE	7/31/2013		0.070J	
50 SURREY DRIVE	4/30/2013		0.058J	
55 SURREY DRIVE	5/1/2013		<0.20	
65 SURREY DRIVE	7/22/2013		0.047J	
20 THORNE ROAD	12/14/2016		<0.147	Irrigation Well Test
35 THORNE ROAD	12/14/2016		<0.150	
170 THORNE ROAD	12/16/2016		<0.147	
175 THORNE ROAD	12/16/2016		<0.147	
10 TURTLE POND ROAD	5/10/2013		<0.20	
20 TURTLE POND ROAD	12/14/2016		<0.147	Irrigation Well Test

Notes: NS - Not Sampled
J - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B - Analyte detected in Blank and Sample
L - LCS or LCSD exceeded the control limits. Results may be biased high.
GW-1 Standard and ORSG for 1,4 dioxane is 0.3 ug/L

3/15/2017 Page 14 of 16
Report: Dioxane all area report
Database: 2016 Eastham New



Property	Date	Duplicate	1,4 Dioxane
5 WALTERS WAY	4/11/2014		0.147
	4/11/2014	Duplicate	<0.144
1 WHIDAH LANE	7/31/2014		<0.144
	4/29/2013		<0.20
3 WHIDAH LANE	5/5/2014		<0.144
	5/16/2013		0.071J
4 WHIDAH LANE	7/24/2013		<0.20
5 WHIDAH LANE	7/30/2013		<0.20
8 WHIDAH LANE	9/19/2013		0.57
9 WHIDAH LANE	7/31/2014		<0.144
	5/7/2013		<0.20
30 WILD GOOSE LANE	6/23/2014		0.109J
35 WILD GOOSE LANE	12/6/2013		0.081J
45 WILD GOOSE LANE	12/3/2013		0.058J
50 WILD GOOSE LANE	12/4/2013		<0.20
10 WOOD DUCK LANE	10/26/2016		<0.147
14 WOOD DUCK LANE	10/5/2016		<0.147

Notes: NS - Not Sampled
J - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B - Analyte detected in Blank and Sample
L - LCS or LCSD exceeded the control limits. Results may be biased high.
GW-1 Standard and ORSG for 1,4 dioxane is 0.3 ug/L

3/15/2017 Page 15 of 16
Report: Dioxane all area report
Datebase: 2016 Eastham New



Property	Date	Duplicate	1,4 Dioxane
Background Samples			
5 ACORN ROAD	5/3/2013		0.042J
10 BALLWIC ROAD	3/13/2014		<0.139
215 BAYSIDE DRIVE	6/19/2014		<0.142
60 BISHOP ROAD	3/11/2014		<0.147
550 BRACKET ROAD	9/19/2014		0.119J
1825 BRIDGE ROAD	3/11/2014		<0.150
60 BRIGGS FIELD ROAD	5/1/2013		<0.20
CCNS Stevens House 105 Brownell Rd.	8/13/2014		<0.147
CCNS Delfino House 880 Cable Rd.	8/13/2014		<0.144
CCNS Coast Guard Beach Doane Rd. Rear	8/12/2014		<0.144
CCNS Doane Rock Picnic Area Doane Rd.	8/12/2014		0.116J
CCNS Young House 585 Doane Rd. Rear	8/13/2014		<0.147
CCNS Humphrey House 25 MacPherson Wy.	8/12/2014		<0.144
CCNS Nauset Light Beach Ocean View Dr.	8/12/2014		<0.144
CCNS Nauset Ranger Station 1050 Nauset Rd.	8/12/2014		<0.147
CCNS Sparrow House 600 Nauset Rd.	8/12/2014		<0.147
CCNS Withus House 850 Nauset Rd.	8/12/2014		<0.147
CCNS Bartett House 40 Ocean View Dr.	8/13/2014		<0.15
CCNS Deane House 22 Tomahawk Trail	8/13/2014		<0.15
CCNS Lyman House 28 Tomahawk Trail	8/13/2014		<0.147
CCNS Benz House 30 Tomahawk Trail	8/13/2014		<0.144
20 CEDAR LANE	5/7/2014		<0.144
25 CEDAR LANE	5/7/2014		<0.144
30 CEDAR LANE	3/25/2014		0.289
	3/25/2014	Duplicate	0.285
35 CEDAR LANE	5/7/2014		<0.142
52 DYER PRINCE ROAD	7/17/2014		<0.144
235 ELDREDGE DRIVE	7/17/2014		<0.144
20 GUERRA WAY #42	4/29/2013		<0.20
20 GUERRA WAY #59	4/29/2013		0.15J
65 KETTLE HOLE ROAD	4/26/2013		<0.20
80 KETTLE HOLE ROAD	5/1/2013		<0.20
115 KINGSBURY BEACH ROAD	3/12/2014		<0.150
155 MARY CHASE ROAD	4/14/2014		<0.145
295 MASSASOIT ROAD	3/10/2014		<0.144
130 MASSASOIT TRAIL	6/26/2014		0.156
	6/26/2014	Duplicate	0.151
155 MEADOW DRIVE	3/13/2014		<0.139
40 ROGERS LANE	6/23/2014		<0.139
190 SAMOSET ROAD	12/6/2013		0.048J
20 SEASHELL LANE	6/23/2014		<0.139
44 SQUIRREL RUN	7/17/2014		<0.142

Notes: NS - Not Sampled
J - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B - Analyte detected in Blank and Sample
L - LCS or LCSD exceeded the control limits. Results may be biased high.
GW-1 Standard and ORSG for 1,4 dioxane is 0.3 ug/L

3/15/2017 Page 16 of 16
Report: Dioxane all area report
Database: 2016 Eastham New



TABLE 3
SUMMARY OF
EASTHAM LANDFILL MONITORING PLAN REQUIREMENTS

Monitoring Type	RES #	Bottled Water List	Continue LMP Sampling	Frequency	Time Frame	VOCs & 1,4- Dioxane	Inorganics	Indicators	Methane, VOCs, O2 & H2S
Monitoring Wells									
MW-3I/3D			Yes	Quarterly	Quarterly	x	x	x	
MW-21S			Yes	Semi-Annually	Spring & Fall	x			
MW-2S, 4S & 5S			Yes	Annually	Fall	x	x	x	
MW-8, DPW Well			Yes	Annually	Fall	x			
Landfill Gas Wells									
GMW-1, 2, 2A, 2B, 3 & 4			Yes	Semi-Annually	Spring & Fall				x
Residential Wells									
265 Alston	RES-18	No	Yes	Annually	2nd Quarter	x	x		
280 Alston	RES-16	No	Yes	Annually	2nd Quarter	x	x		
125 Meetinghouse	RES-7	No	Yes	Annually	2nd Quarter	x	x		
170 Meetinghouse	RES-33	No	Yes	Annually	2nd Quarter	x			
75 Old Orchard	RES-13	No	Yes	Annually	2nd Quarter	x	x		
130 Old Orchard	RES-9	No	Yes	Annually	2nd Quarter	x	x		
210 Old Orchard	RES-3	No	Yes	Annually	2nd Quarter	x	x		
290 Old Orchard	RES-2	No	Yes	Annually	2nd Quarter	x	x		

1st Quarter: December - February (winter)
2nd Quarter: March - May (spring)
3rd Quarter: June - August (summer)
4th Quarter : September - November

TABLE 4.1
SECTION 1
SUMMARY OF LANDFILL MONITORING PLAN
GROUNDWATER ANALYTICAL RESULTS
Volatile Organic Compounds
Eastham Landfill Monitoring Wells and Private Drinking Wells
Eastham, MA
(All results in ug/l)

Property	LMP Sample Frequency	Date	1,4-Dioxane	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloropropene
Standards										
GW1			0.3	5	200	2	5	70	7	NA
GW3			50000	50000	20000	50000	50000	20000	30000	NA
MMCL			NA	NA	200	NA	5	NA	7	NA
ORSG			0.3	NA	NA	NA	NA	70	NA	NA
Results										
ESMW-1D		9/21/2016	<0.144	NS	NS	NS	NS	NS	NS	NS
ESMW-1I		9/21/2016	0.244	NS	NS	NS	NS	NS	NS	NS
ESMW-1S		9/21/2016	1.39	NS	NS	NS	NS	NS	NS	NS
ESMW-2D		9/21/2016	0.172	NS	NS	NS	NS	NS	NS	NS
ESMW-2I		9/21/2016	<0.147	NS	NS	NS	NS	NS	NS	NS
ESMW-2S		9/21/2016	<0.156	NS	NS	NS	NS	NS	NS	NS
ESMW-3D		9/21/2016	0.107J	NS	NS	NS	NS	NS	NS	NS
ESMW-3I		9/21/2016	0.123J	NS	NS	NS	NS	NS	NS	NS
ESMW-3S		9/21/2016	0.145	NS	NS	NS	NS	NS	NS	NS
ESMW-4D		9/21/2016	<0.147	NS	NS	NS	NS	NS	NS	NS
ESMW-4I		9/21/2016	<0.147	NS	NS	NS	NS	NS	NS	NS
MW 2D		2/14/2013	0.14 J	NS	NS	NS	NS	NS	NS	NS
		12/6/2012	<2.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
MW 2S	Annual	11/29/2016	0.373	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0
		11/24/2015	0.633	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0
		12/16/2014	0.337	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0
		12/18/2013	<2.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
		2/14/2013	0.47	NS	NS	NS	NS	NS	NS	NS
		12/6/2012	<2.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
		7/10/2012	<500	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50

Notes: GW-1 and GW-3 MCP Method 1 Standards
MMCL-Massachusetts Max. Contaminant Level
ORSG-Office of Research and Standards Guideline
NS - Not Sampled
J - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B - Analyte detected in Blank and Sample
* Residential samples will be tested for all VOCs during 2nd quarter of the year.



Property	LMP Sample Frequency	Date	1,4-Dioxane	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloropropene	
MW 3D	Quarterly	3/1/2017	6.94	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	
		11/29/2016	6.37	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	
		8/10/2016	7.32	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	
		5/18/2016	7.79	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	
		2/23/2016	7.23	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	
		11/24/2015	8.65	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	
		8/26/2015	8.94	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	
		5/13/2015	11	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	
		11/10/2014	<2.5	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	
		11/10/2014	Duplicate	<2.5	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
		10/27/2014	12.8	NS	NS	NS	NS	NS	NS	NS	
		9/3/2014	<500	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	
		5/19/2014	13	<1.0	<1.0	<0.50	<1.0	<1.0	<1.0	<1.0	
		2/27/2014	12	<1.0	<1.0	<0.50	<1.0	<1.0	<1.0	<1.0	
		11/25/2013	16	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
		9/5/2013	<500	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
		5/8/2013	17	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
		2/14/2013	<500	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
		12/6/2012	<2.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
		10/9/2012	18	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
		7/10/2012	<500	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
		3/20/2012	<500	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
		MW 3I	Quarterly	3/1/2017	<0.144	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
11/29/2016	<0.144			<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	
8/10/2016	<0.144			<1.0	<1.0	<1.0	<1.0	0.39J	<1.0	<2.0	
5/18/2016	<0.144			<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	
2/23/2016	<0.147			<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	
11/24/2015	<0.147			<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	
8/26/2015	<0.147			<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	
5/13/2015	<0.147			<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	
12/16/2014	<0.142			NS	NS	NS	NS	NS	NS	NS	
11/10/2014	<2.5			<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	
9/3/2014	<500			<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	
5/19/2014	<1.0			<1.0	<1.0	<0.50	<1.0	<1.0	<1.0	<1.0	
2/27/2014	<1.0			<1.0	<1.0	<0.50	<1.0	<1.0	<1.0	<1.0	
11/25/2013	<2.5			<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
9/5/2013	<500			<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
5/8/2013	<2.5			<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
2/14/2013	<0.20			NS	NS	NS	NS	NS	NS	NS	
2/14/2013	<500	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50			
12/6/2012	<2.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50			
10/9/2012	<2.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50			

Notes: GW-1 and GW-3 MCP Method 1 Standards
MMCL-Massachusetts Max. Contaminant Level
ORSG-Office of Research and Standards Guideline
NS - Not Sampled
J - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B - Analyte detected in Blank and Sample
* Residential samples will be tested for all VOCs during 2nd quarter of the year.



Property	LMP Sample Frequency	Date	1,4-Dioxane	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloropropene
MW 3I	Quarterly	7/10/2012	<500	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
		3/20/2012	<500	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
MW 3S		2/14/2013	<0.20	NS	NS	NS	NS	NS	NS	NS
		12/6/2012	<2.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
MW 4D		10/27/2014	<0.150	NS	NS	NS	NS	NS	NS	NS
		2/14/2013	<0.20	NS	NS	NS	NS	NS	NS	NS
		12/6/2012	<2.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
MW 4S	Annual	11/29/2016	1.18	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0
		11/24/2015	0.842	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0
		12/16/2014	<250	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0
		10/27/2014	0.652	NS	NS	NS	NS	NS	NS	NS
		12/18/2013	<2.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
		2/14/2013	1.5	NS	NS	NS	NS	NS	NS	NS
		12/6/2012	<2.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
		7/10/2012	<500	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
MW 5D		10/27/2014	<0.153	NS	NS	NS	NS	NS	NS	NS
		2/14/2013	<0.20	NS	NS	NS	NS	NS	NS	NS
		12/5/2012	<2.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
MW 5S	Annual	11/29/2016	1.17	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0
		11/24/2015	1.39	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0
		12/16/2014	<250	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0
		10/27/2014	1.65	NS	NS	NS	NS	NS	NS	NS
		12/18/2013	<2.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
		2/14/2013	1.2	NS	NS	NS	NS	NS	NS	NS
		12/5/2012	<2.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
		7/10/2012	<500	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
MW 7		10/27/2014	<0.150	NS	NS	NS	NS	NS	NS	
MW 8	Annual	11/29/2016	0.376	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0
		11/24/2015	0.238	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0
		12/16/2014	0.283	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0
		12/18/2013	<2.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
		3/14/2013	0.33	NS	NS	NS	NS	NS	NS	NS
		12/7/2012	<2.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
MW 10		10/27/2014	0.186	NS	NS	NS	NS	NS	NS	
MW 21D		10/27/2014	0.215	NS	NS	NS	NS	NS	NS	NS
		2/25/2013	<50	<1.0	<1.0	<0.50	<1.0	<1.0	<1.0	<1.0
MW 21S	Semi-Annual	11/10/2015	0.202	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0
		5/13/2015	3.19	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0
		10/27/2014	2.93	NS	NS	NS	NS	NS	NS	NS

Notes: GW-1 and GW-3 MCP Method 1 Standards
MMCL-Massachusetts Max. Contaminant Level
ORSG-Office of Research and Standards Guideline
NS - Not Sampled
J - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B - Analyte detected in Blank and Sample
* Residential samples will be tested for all VOCs during 2nd quarter of the year.



Property	LMP Sample Frequency	Date	1,4-Dioxane	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloropropene
MW 21S	Semi-Annual	5/16/2013	<50	<1.0	<1.0	<0.50	<1.0	<1.0	<1.0	<1.0
		12/7/2012	<2.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
DPW WELL	Annual	11/29/2016	<0.142	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0
		11/24/2015	<0.144	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0
		12/16/2014	0.0793J	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0
265 ALSTON AVENUE	Annual	5/12/2016	<0.147	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0
		5/12/2016	Duplicate	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0
		4/1/2015	<0.148	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0
		3/28/2014	<0.139	NS	NS	NS	NS	NS	NS	NS
		12/18/2013	<0.20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
		3/14/2013	0.055J	NS	NS	NS	NS	NS	NS	NS
		12/6/2012	<2.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
		6/21/2012	NS	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
280 ALSTON AVENUE	Annual	5/12/2016	<0.147	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0
		5/13/2015	<0.156	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0
		12/17/2014	<0.142	NS	NS	NS	NS	NS	NS	NS
		12/18/2013	<0.20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
		2/22/2013	<0.20	NS	NS	NS	NS	NS	NS	NS
		12/6/2012	<2.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
		6/21/2012	NS	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
125 MEETINGHOUSE ROAD	Annual	7/21/2016	0.193	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0
		7/21/2016	Duplicate	0.111J	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0
		5/8/2013	0.15J	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
		6/21/2012	NS	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
170 MEETINGHOUSE ROAD	Annual	5/12/2016	<0.147	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0
		5/12/2016	Duplicate	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0
		5/13/2015	<0.144	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0
		8/15/2014	<0.144	NS	NS	NS	NS	NS	NS	NS
		2/15/2013	<0.20	NS	NS	NS	NS	NS	NS	NS
		12/8/2012	<2.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
75 OLD ORCHARD ROAD	Annual	5/12/2016	0.100J	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0
		5/12/2016	Duplicate	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0
		8/15/2014	<0.150	NS	NS	NS	NS	NS	NS	NS
		2/21/2013	0.17J	NS	NS	NS	NS	NS	NS	NS
		12/6/2012	<2.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
		6/21/2012	NS	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
130 OLD ORCHARD ROAD	Annual	12/6/2012	<2.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
		6/21/2012	NS	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
130A OLD ORCHARD ROAD	Annual	5/29/2015	<0.153	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0
		12/17/2014	<0.142	NS	NS	NS	NS	NS	NS	NS

Notes: GW-1 and GW-3 MCP Method 1 Standards
MMCL-Massachusetts Max. Contaminant Level
ORSG-Office of Research and Standards Guideline
NS - Not Sampled
J - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B - Analyte detected in Blank and Sample
* Residential samples will be tested for all VOCs during 2nd quarter of the year.



Property	LMP Sample Frequency	Date	1,4-Dioxane	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloropropene
130A OLD ORCHARD ROAD	Annual	12/18/2013	<0.20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
		2/25/2013	<0.20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
130B OLD ORCHARD ROAD	Annual	5/13/2016	<0.142	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0
		5/29/2015	<0.147	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0
		12/17/2014	<0.142	NS	NS	NS	NS	NS	NS	NS
		12/18/2013	<0.20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
		2/25/2013	<0.20	NS	NS	NS	NS	NS	NS	NS
210 OLD ORCHARD ROAD	Annual	5/13/2016	<0.144	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0
		12/18/2013	<0.20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
		2/15/2013	<0.20	NS	NS	NS	NS	NS	NS	NS
		12/6/2012	<2.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
		6/21/2012	NS	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
290 OLD ORCHARD ROAD	Annual	5/12/2016	<0.147	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0
		3/2/2015	Inf.	<0.156	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0
		3/2/2015	Eff.	<0.144	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0
		7/23/2014		<0.144	NS	NS	NS	NS	NS	NS
		5/16/2013		0.068J	NS	NS	NS	NS	NS	NS
		5/9/2013		NS	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
		2/15/2013		<0.20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
		6/21/2012		NS	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50

Notes: GW-1 and GW-3 MCP Method 1 Standards

MMCL-Massachusetts Max. Contaminant Level

ORSG-Office of Research and Standards Guideline

NS - Not Sampled

J - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

B - Analyte detected in Blank and Sample

* Residential samples will be tested for all VOCs during 2nd quarter of the year.

3/23/2017

Page 5 of 5

Report:

GW VOC 1

Datebase:

Eastham Landfill Monitoring



TABLE 4.1
SECTION 2
SUMMARY OF LANDFILL MONITORING PLAN
GROUNDWATER ANALYTICAL RESULTS
Volatile Organic Compounds
Eastham Landfill Monitoring Wells and Private Drinking Wells
Eastham, MA
(All results in ug/l)

Property	LMP Sample Frequency	Date	EDB	1,2,3-Trichlorobenzene	1,2,3-Trichloropropane	1,2,4-Trichlorobenzene	1,2,4-Trimethylbenzene	1,2-Dibromo-3-Chloropropane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane
Standards											
GW1			0.02	NA	NA	70	NA	NA	600	5	5
GW3			50000	NA	NA	50000	NA	NA	2000	20000	50000
MMCL			0.02	NA	NA	70	NA	0.2	600	5	5
ORSG			NA	NA	NA	NA	NA	NA	NA	NA	NA
Results											
ESMW-1D		9/21/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS
ESMW-1I		9/21/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS
ESMW-1S		9/21/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS
ESMW-2D		9/21/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS
ESMW-2I		9/21/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS
ESMW-2S		9/21/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS
ESMW-3D		9/21/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS
ESMW-3I		9/21/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS
ESMW-3S		9/21/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS
ESMW-4D		9/21/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS
ESMW-4I		9/21/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW 2D		2/14/2013	NS	NS	NS	NS	NS	NS	NS	NS	NS
		12/6/2012	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
MW 2S	Annual	11/29/2016	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0	<1.0	<1.0
		11/24/2015	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0	<1.0	<1.0
		12/16/2014	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0	<1.0	<1.0
		12/18/2013	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
		2/14/2013	NS	NS	NS	NS	NS	NS	NS	NS	NS
		12/6/2012	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50

Notes: GW-1 and GW-3 MCP Method 1 Standards
MMCL-Massachusetts Max. Contaminant Level
ORSG-Office of Research and Standards Guideline
NS - Not Sampled
J - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B - Analyte detected in Blank and Sample
* Residential samples will be tested for all VOCs during 2nd quarter of the year.



Property	LMP Sample Frequency	Date	EDB	1,2,3-Trichlorobenzene	1,2,3-Trichloropropane	1,2,4-Trichlorobenzene	1,2,4-Trimethylbenzene	1,2-Dibromo-3-Chloropropane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane
MW 2S	Annual	7/10/2012	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
MW 3D	Quarterly	3/1/2017	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0	<1.0	<1.0
		11/29/2016	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0	<1.0	<1.0
		8/10/2016	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0	<1.0	<1.0
		5/18/2016	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0	<1.0	<1.0
		2/23/2016	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0	<1.0	<1.0
		11/24/2015	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0	<1.0	<1.0
		8/26/2015	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0	<1.0	<1.0
		5/13/2015	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0	<1.0	<1.0
		11/10/2014	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
		11/10/2014	Duplicate	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
		10/27/2014	NS	NS	NS	NS	NS	NS	NS	NS	NS
		9/3/2014	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
		5/19/2014	<0.50	<1.0	<1.0	<1.0	<1.0	<0.50	<1.0	<1.0	<1.0
		2/27/2014	<0.50	<1.0	<1.0	<1.0	<1.0	<0.50	<1.0	<1.0	<1.0
		11/25/2013	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
		9/5/2013	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
		5/8/2013	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
		2/14/2013	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
		12/6/2012	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
		10/9/2012	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
7/10/2012	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		
3/20/2012	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		
MW 3I	Quarterly	3/1/2017	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0	<1.0	<1.0
		11/29/2016	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0	<1.0	<1.0
		8/10/2016	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0	<1.0	<1.0
		5/18/2016	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0	<1.0	<1.0
		2/23/2016	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0	<1.0	<1.0
		11/24/2015	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0	<1.0	<1.0
		8/26/2015	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0	<1.0	<1.0
		5/13/2015	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0	<1.0	<1.0
		12/16/2014	NS	NS	NS	NS	NS	NS	NS	NS	NS
		11/10/2014	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
		9/3/2014	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
		5/19/2014	<0.50	<1.0	<1.0	<1.0	<1.0	<0.50	<1.0	<1.0	<1.0
		2/27/2014	<0.50	<1.0	<1.0	<1.0	<1.0	<0.50	<1.0	<1.0	<1.0
		11/25/2013	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
		9/5/2013	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50

Notes: GW-1 and GW-3 MCP Method 1 Standards
MMCL-Massachusetts Max. Contaminant Level
ORSG-Office of Research and Standards Guideline
NS - Not Sampled
J - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B - Analyte detected in Blank and Sample
* Residential samples will be tested for all VOCs during 2nd quarter of the year.



Property	LMP Sample Frequency	Date	EDB	1,2,3-Trichlorobenzene	1,2,3-Trichloropropane	1,2,4-Trichlorobenzene	1,2,4-Trimethylbenzene	1,2-Dibromo-3-Chloropropane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	
MW 3I	Quarterly	5/8/2013	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
		2/14/2013	NS	NS	NS	NS	NS	NS	NS	NS	NS	
		2/14/2013	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
		12/6/2012	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
		10/9/2012	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
		7/10/2012	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
		3/20/2012	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
MW 3S		2/14/2013	NS	NS	NS	NS	NS	NS	NS	NS	NS	
		12/6/2012	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
MW 4D		10/27/2014	NS	NS	NS	NS	NS	NS	NS	NS	NS	
		2/14/2013	NS	NS	NS	NS	NS	NS	NS	NS	NS	
		12/6/2012	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
MW 4S	Annual	11/29/2016	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0	<1.0	<1.0	
		11/24/2015	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0	<1.0	<1.0	
		12/16/2014	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0	<1.0	<1.0	
		10/27/2014	NS	NS	NS	NS	NS	NS	NS	NS	NS	
		12/18/2013	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
		2/14/2013	NS	NS	NS	NS	NS	NS	NS	NS	NS	
		12/6/2012	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
		7/10/2012	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
MW 5D		10/27/2014	NS	NS	NS	NS	NS	NS	NS	NS	NS	
		2/14/2013	NS	NS	NS	NS	NS	NS	NS	NS	NS	
		12/5/2012	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
MW 5S	Annual	11/29/2016	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0	<1.0	<1.0	
		11/24/2015	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0	<1.0	<1.0	
		12/16/2014	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0	<1.0	<1.0	
		10/27/2014	NS	NS	NS	NS	NS	NS	NS	NS	NS	
		12/18/2013	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
		2/14/2013	NS	NS	NS	NS	NS	NS	NS	NS	NS	
		12/5/2012	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
		7/10/2012	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
MW 7		10/27/2014	NS	NS	NS	NS	NS	NS	NS	NS		
MW 8	Annual	11/29/2016	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0	<1.0	<1.0	
		11/24/2015	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0	<1.0	<1.0	
		12/16/2014	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0	<1.0	<1.0	
		12/18/2013	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
		3/14/2013	NS	NS	NS	NS	NS	NS	NS	NS	NS	

Notes: GW-1 and GW-3 MCP Method 1 Standards
MMCL-Massachusetts Max. Contaminant Level
ORSG-Office of Research and Standards Guideline
NS - Not Sampled
J - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B - Analyte detected in Blank and Sample
* Residential samples will be tested for all VOCs during 2nd quarter of the year.

Property	LMP Sample Frequency	Date	EDB	1,2,3-Trichlorobenzene	1,2,3-Trichloropropane	1,2,4-Trichlorobenzene	1,2,4-Trimethylbenzene	1,2-Dibromo-3-Chloropropane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane
MW 8	Annual	12/7/2012	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
MW 10		10/27/2014	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW 21D		10/27/2014	NS	NS	NS	NS	NS	NS	NS	NS	NS
		2/25/2013		<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0
MW 21S	Semi-Annual	11/10/2015	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0	<1.0	<1.0
		5/13/2015	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0	<1.0	<1.0
		10/27/2014	NS	NS	NS	NS	NS	NS	NS	NS	NS
		5/16/2013		<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0
		12/7/2012	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
DPW WELL	Annual	11/29/2016	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0	<1.0	<1.0
		11/24/2015	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0	<1.0	<1.0
		12/16/2014	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0	<1.0	<1.0
265 ALSTON AVENUE	Annual	5/12/2016	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0	<1.0	<1.0
		5/12/2016	Duplicate	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0	<1.0	<1.0
		4/1/2015	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0	<1.0	<1.0
		3/28/2014	NS	NS	NS	NS	NS	NS	NS	NS	NS
		12/18/2013	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
		3/14/2013	NS	NS	NS	NS	NS	NS	NS	NS	NS
		12/6/2012	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
		6/21/2012	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
280 ALSTON AVENUE	Annual	5/12/2016	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0	<1.0	<1.0
		5/13/2015	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0	<1.0	<1.0
		12/17/2014	NS	NS	NS	NS	NS	NS	NS	NS	NS
		12/18/2013	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
		2/22/2013	NS	NS	NS	NS	NS	NS	NS	NS	NS
		12/6/2012	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
		6/21/2012	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
125 MEETINGHOUSE	Annual	7/21/2016	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0	<1.0	<1.0
		7/21/2016	Duplicate	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0	<1.0	<1.0
		5/8/2013	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
		6/21/2012	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
170 MEETINGHOUSE	Annual	5/12/2016	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0	<1.0	<1.0
		5/12/2016	Duplicate	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0	<1.0	<1.0
		5/13/2015	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0	<1.0	<1.0
		8/15/2014	NS	NS	NS	NS	NS	NS	NS	NS	NS
		2/15/2013	NS	NS	NS	NS	NS	NS	NS	NS	NS
		12/8/2012	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50

Notes: GW-1 and GW-3 MCP Method 1 Standards
MMCL-Massachusetts Max. Contaminant Level
ORSG-Office of Research and Standards Guideline
NS - Not Sampled
J - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B - Analyte detected in Blank and Sample
* Residential samples will be tested for all VOCs during 2nd quarter of the year.



Property	LMP Sample Frequency	Date		EDB	1,2,3-Trichlorobenzene	1,2,3-Trichloropropane	1,2,4-Trichlorobenzene	1,2,4-Trimethylbenzene	1,2-Dibromo-3-Chloropropane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane
75 OLD ORCHARD	Annual	5/12/2016		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0	<1.0	<1.0
		5/12/2016	Duplicate	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0	<1.0	<1.0
		8/15/2014		NS	NS	NS	NS	NS	NS	NS	NS	NS
		2/21/2013		NS	NS	NS	NS	NS	NS	NS	NS	NS
		12/6/2012		<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
		6/21/2012		<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
130 OLD ORCHARD	Annual	12/6/2012		<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
		6/21/2012		<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
130A OLD ORCHARD	Annual	5/29/2015		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0	<1.0	<1.0
		12/17/2014		NS	NS	NS	NS	NS	NS	NS	NS	NS
		12/18/2013		<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
		2/25/2013		<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
130B OLD ORCHARD	Annual	5/13/2016		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0	<1.0	<1.0
		5/29/2015		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0	<1.0	<1.0
		12/17/2014		NS	NS	NS	NS	NS	NS	NS	NS	NS
		12/18/2013		<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
		2/25/2013		NS	NS	NS	NS	NS	NS	NS	NS	NS
210 OLD ORCHARD	Annual	5/13/2016		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0	<1.0	<1.0
		12/18/2013		<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
		2/15/2013		NS	NS	NS	NS	NS	NS	NS	NS	NS
		12/6/2012		<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
		6/21/2012		<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
290 OLD ORCHARD	Annual	5/12/2016		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0	<1.0	<1.0
		3/2/2015 ^{Inf.}		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0	<1.0	<1.0
		3/2/2015 ^{Eff.}		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0	<1.0	<1.0
		7/23/2014		NS	NS	NS	NS	NS	NS	NS	NS	NS
		5/16/2013		NS	NS	NS	NS	NS	NS	NS	NS	NS
		5/9/2013		<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
		2/15/2013		<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
		6/21/2012		<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50

Notes: GW-1 and GW-3 MCP Method 1 Standards
MMCL-Massachusetts Max. Contaminant Level
ORSG-Office of Research and Standards Guideline
NS - Not Sampled
J - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B - Analyte detected in Blank and Sample
* Residential samples will be tested for all VOCs during 2nd quarter of the year.

TABLE 4.1
SECTION 3
SUMMARY OF LANDFILL MONITORING PLAN
GROUNDWATER ANALYTICAL RESULTS
Volatile Organic Compounds
Eastham Landfill Monitoring Wells and Private Drinking Wells
Eastham, MA
(All results in ug/l)

Property	LMP Sample Frequency	Date	1,3,5-Trimethylbenzene	1,3-Dichlorobenzene	1,3-Dichloropropane	1,4-Dichlorobenzene	2,2-Dichloropropane	2-Butanone (MEK)	2-Chlorotoluene	2-Hexanone	4-Chlorotoluene
Standards											
GW1			NA	100	NA	5	NA	4000	NA	NA	NA
GW3			NA	50000	NA	8000	NA	50000	NA	NA	NA
MMCL			NA	NA	NA	5	NA	NA	NA	NA	NA
ORSG			NA	NA	NA	NA	NA	4000	NA	NA	NA
Results											
ESMW-1D		9/21/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS
ESMW-1I		9/21/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS
ESMW-1S		9/21/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS
ESMW-2D		9/21/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS
ESMW-2I		9/21/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS
ESMW-2S		9/21/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS
ESMW-3D		9/21/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS
ESMW-3I		9/21/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS
ESMW-3S		9/21/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS
ESMW-4D		9/21/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS
ESMW-4I		9/21/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW 2D		2/14/2013	NS	NS	NS	NS	NS	NS	NS	NS	NS
		12/6/2012	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	<0.50	<5.0	<0.50
MW 2S	Annual	11/29/2016	<2.0	<1.0	<2.0	<1.0	<2.0	<5.0	<2.0	<5.0	<2.0
		11/24/2015	<2.0	<1.0	<2.0	<1.0	<2.0	<5.0	<2.0	<5.0	<2.0
		12/16/2014	<2.0	<1.0	<2.0	<1.0	<2.0	<5.0	<2.0	<5.0	<2.0
		12/18/2013	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	<0.50	<5.0	<0.50
		2/14/2013	NS	NS	NS	NS	NS	NS	NS	NS	NS
		12/6/2012	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	<0.50	<5.0	<0.50
		7/10/2012	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	<0.50	<5.0	<0.50

Notes: GW-1 and GW-3 MCP Method 1 Standards
MMCL-Massachusetts Max. Contaminant Level
ORSG-Office of Research and Standards Guideline
NS - Not Sampled
J - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B - Analyte detected in Blank and Sample
* Residential samples will be tested for all VOCs during 2nd quarter of the year.



Property	LMP Sample Frequency	Date	1,3,5-Trimethylbenzene	1,3-Dichlorobenzene	1,3-Dichloropropane	1,4-Dichlorobenzene	2,2-Dichloropropane	2-Butanone (MEK)	2-Chlorotoluene	2-Hexanone	4-Chlorotoluene
MW 3D	Quarterly	3/1/2017	<2.0	<1.0	<2.0	<1.0	<2.0	<5.0	<2.0	<5.0	<2.0
		11/29/2016	<2.0	<1.0	<2.0	<1.0	<2.0	<5.0	<2.0	<5.0	<2.0
		8/10/2016	<2.0	<1.0	<2.0	0.28J	<2.0	<5.0	<2.0	<5.0	<2.0
		5/18/2016	<2.0	<1.0	<2.0	0.23J	<2.0	<5.0	<2.0	<5.0	<2.0
		2/23/2016	<2.0	<1.0	<2.0	0.28J	<2.0	<5.0	<2.0	<5.0	<2.0
		11/24/2015	<2.0	<1.0	<2.0	0.30J	<2.0	<5.0	<2.0	<5.0	<2.0
		8/26/2015	<2.0	<1.0	<2.0	0.28 J	<2.0	<5.0	<2.0	<5.0	<2.0
		5/13/2015	<2.0	<1.0	<2.0	0.33J	<2.0	<5.0	<2.0	<5.0	<2.0
		11/10/2014	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
		11/10/2014	Duplicate	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
		10/27/2014		NS	NS	NS	NS	NS	NS	NS	NS
		9/3/2014		<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
		5/19/2014		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.50	<1.0
		2/27/2014		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.50	<1.0
		11/25/2013		<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
		9/5/2013		<0.50	<0.50	<0.50	0.50	<0.50	<0.50	<0.50	<0.50
		5/8/2013		<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
		2/14/2013		<0.50	<0.50	<0.50	0.51	<0.50	<0.50	<0.50	<0.50
		12/6/2012		<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
		10/9/2012		<0.50	<0.50	<0.50	0.55	<0.50	<0.50	<0.50	<0.50
7/10/2012		<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		
3/20/2012		<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		
MW 3I	Quarterly	3/1/2017	<2.0	<1.0	<2.0	<1.0	<2.0	<5.0	<2.0	<5.0	<2.0
		11/29/2016	<2.0	<1.0	<2.0	<1.0	<2.0	<5.0	<2.0	<5.0	<2.0
		8/10/2016	<2.0	<1.0	<2.0	<1.0	<2.0	<5.0	<2.0	<5.0	<2.0
		5/18/2016	<2.0	<1.0	<2.0	<1.0	<2.0	<5.0	<2.0	<5.0	<2.0
		2/23/2016	<2.0	<1.0	<2.0	<1.0	<2.0	<5.0	<2.0	<5.0	<2.0
		11/24/2015	<2.0	<1.0	<2.0	<1.0	<2.0	<5.0	<2.0	<5.0	<2.0
		8/26/2015	<2.0	<1.0	<2.0	<1.0	<2.0	<5.0	<2.0	<5.0	<2.0
		5/13/2015	<2.0	<1.0	<2.0	<1.0	<2.0	<5.0	<2.0	<5.0	<2.0
		12/16/2014		NS	NS	NS	NS	NS	NS	NS	NS
		11/10/2014		<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
		9/3/2014		<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
		5/19/2014		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.50	<1.0
		2/27/2014		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.50	<1.0
		11/25/2013		<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
		9/5/2013		<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
		5/8/2013		<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
		2/14/2013		NS	NS	NS	NS	NS	NS	NS	NS
		2/14/2013		<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
		12/6/2012		<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50

Notes: GW-1 and GW-3 MCP Method 1 Standards
MMCL-Massachusetts Max. Contaminant Level
ORSG-Office of Research and Standards Guideline
NS - Not Sampled
J - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B - Analyte detected in Blank and Sample
* Residential samples will be tested for all VOCs during 2nd quarter of the year.



Property	LMP Sample Frequency	Date	1,3,5-Trimethylbenzene	1,3-Dichlorobenzene	1,3-Dichloropropane	1,4-Dichlorobenzene	2,2-Dichloropropane	2-Butanone (MEK)	2-Chlorotoluene	2-Hexanone	4-Chlorotoluene
MW 3I	Quarterly	10/9/2012	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	<0.50	<5.0	<0.50
		7/10/2012	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	<0.50	<5.0	<0.50
		3/20/2012	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	<0.50	<5.0	<0.50
MW 3S		2/14/2013	NS	NS	NS	NS	NS	NS	NS	NS	NS
		12/6/2012	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	<0.50	<5.0	<0.50
MW 4D		10/27/2014	NS	NS	NS	NS	NS	NS	NS	NS	NS
		2/14/2013	NS	NS	NS	NS	NS	NS	NS	NS	NS
		12/6/2012	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	<0.50	<5.0	<0.50
MW 4S	Annual	11/29/2016	<2.0	<1.0	<2.0	<1.0	<2.0	<5.0	<2.0	<5.0	<2.0
		11/24/2015	<2.0	<1.0	<2.0	<1.0	<2.0	<5.0	<2.0	<5.0	<2.0
		12/16/2014	<2.0	<1.0	<2.0	<1.0	<2.0	<5.0	<2.0	<5.0	<2.0
		10/27/2014	NS	NS	NS	NS	NS	NS	NS	NS	NS
		12/18/2013	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	<0.50	<5.0	<0.50
		2/14/2013	NS	NS	NS	NS	NS	NS	NS	NS	NS
		12/6/2012	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	<0.50	<5.0	<0.50
		7/10/2012	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	<0.50	<5.0	<0.50
MW 5D		10/27/2014	NS	NS	NS	NS	NS	NS	NS	NS	NS
		2/14/2013	NS	NS	NS	NS	NS	NS	NS	NS	NS
		12/5/2012	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	<0.50	<5.0	<0.50
MW 5S	Annual	11/29/2016	<2.0	<1.0	<2.0	<1.0	<2.0	<5.0	<2.0	<5.0	<2.0
		11/24/2015	<2.0	<1.0	<2.0	<1.0	<2.0	<5.0	<2.0	<5.0	<2.0
		12/16/2014	<2.0	<1.0	<2.0	<1.0	<2.0	<5.0	<2.0	<5.0	<2.0
		10/27/2014	NS	NS	NS	NS	NS	NS	NS	NS	NS
		12/18/2013	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	<0.50	<5.0	<0.50
		2/14/2013	NS	NS	NS	NS	NS	NS	NS	NS	NS
		12/5/2012	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	<0.50	<5.0	<0.50
7/10/2012	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	<0.50	<5.0	<0.50		
MW 7		10/27/2014	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW 8	Annual	11/29/2016	<2.0	<1.0	<2.0	<1.0	<2.0	<5.0	<2.0	<5.0	<2.0
		11/24/2015	<2.0	<1.0	<2.0	<1.0	<2.0	<5.0	<2.0	<5.0	<2.0
		12/16/2014	<2.0	<1.0	<2.0	<1.0	<2.0	<5.0	<2.0	<5.0	<2.0
		12/18/2013	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	<0.50	<5.0	<0.50
		3/14/2013	NS	NS	NS	NS	NS	NS	NS	NS	NS
12/7/2012	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	<0.50	<5.0	<0.50		
MW 10		10/27/2014	NS	NS	NS	NS	NS	NS	NS	NS	
MW 21D		10/27/2014	NS	NS	NS	NS	NS	NS	NS	NS	NS
		2/25/2013	<1.0	<1.0	<1.0	<1.0	<1.0	2.1J *	<1.0	<10	<1.0
MW 21S	Semi-Annual	11/10/2015	<2.0	<1.0	<2.0	<1.0	<2.0	<5.0	<2.0	<5.0	<2.0
		5/13/2015	<2.0	<1.0	<2.0	<1.0	<2.0	<5.0	<2.0	<5.0	<2.0

Notes: GW-1 and GW-3 MCP Method 1 Standards
MMCL-Massachusetts Max. Contaminant Level
ORSG-Office of Research and Standards Guideline
NS - Not Sampled
J - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B - Analyte detected in Blank and Sample
* Residential samples will be tested for all VOCs during 2nd quarter of the year.



Property	LMP Sample Frequency	Date	1,3,5-Trimethylbenzene	1,3-Dichlorobenzene	1,3-Dichloropropane	1,4-Dichlorobenzene	2,2-Dichloropropane	2-Butanone (MEK)	2-Chlorotoluene	2-Hexanone	4-Chlorotoluene	
MW 21S	Semi-Annual	10/27/2014	NS	NS	NS	NS	NS	NS	NS	NS	NS	
		5/16/2013	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
		12/7/2012	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NS	<0.50	NS	<0.50
DPW WELL	Annual	11/29/2016	<2.0	<1.0	<2.0	<1.0	<2.0	<5.0	<2.0	<5.0	<2.0	
		11/24/2015	<2.0	<1.0	<2.0	<1.0	<2.0	<5.0	<2.0	<5.0	<2.0	
		12/16/2014	<2.0	<1.0	<2.0	<1.0	<2.0	<5.0	<2.0	<5.0	<2.0	
265 ALSTON AVENUE	Annual	5/12/2016	<2.0	<1.0	<2.0	<1.0	<2.0	<5.0	<2.0	<5.0	<2.0	
		5/12/2016	Duplicate	<2.0	<1.0	<2.0	<1.0	<2.0	<5.0	<2.0	<5.0	<2.0
		4/1/2015	<2.0	<1.0	<2.0	<1.0	<2.0	<5.0	<2.0	<5.0	<2.0	
		3/28/2014	NS	NS	NS	NS	NS	NS	NS	NS	NS	
		12/18/2013	<0.50	<0.50	<0.50	<0.50	<0.50	<2.5	<0.50	<0.50	<0.50	
		3/14/2013	NS	NS	NS	NS	NS	NS	NS	NS	NS	
		12/6/2012	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
		6/21/2012	<0.50	<0.50	<0.50	<0.50	<0.50	NS	<0.50	NS	<0.50	
280 ALSTON AVENUE	Annual	5/12/2016	<2.0	<1.0	<2.0	<1.0	<2.0	<5.0	<2.0	<5.0	<2.0	
		5/13/2015	<2.0	<1.0	<2.0	<1.0	<2.0	NS	<2.0	<5.0	<2.0	
		12/17/2014	NS	NS	NS	NS	NS	NS	NS	NS	NS	
		12/18/2013	<0.50	<0.50	<0.50	<0.50	<0.50	<2.5	<0.50	NS	<0.50	
		2/22/2013	NS	NS	NS	NS	NS	NS	NS	NS	NS	
		12/6/2012	<0.50	<0.50	<0.50	<0.50	<0.50	NS	<0.50	NS	<0.50	
		6/21/2012	<0.50	<0.50	<0.50	<0.50	<0.50	NS	<0.50	NS	<0.50	
125 MEETINGHOUSE ROAD	Annual	7/21/2016	<2.0	<1.0	<2.0	<1.0	<2.0	6.5	<2.0	<5.0	<2.0	
		7/21/2016	Duplicate	<2.0	<1.0	<2.0	<1.0	<2.0	7.5	<2.0	<5.0	<2.0
		5/8/2013	<0.50	<0.50	<0.50	<0.50	<0.50	<2.5	<0.50	<0.50	<0.50	
		6/21/2012	<0.50	<0.50	<0.50	<0.50	<0.50	NS	<0.50	NS	<0.50	
170 MEETINGHOUSE ROAD	Annual	5/12/2016	<2.0	<1.0	<2.0	<1.0	<2.0	<5.0	<2.0	<5.0	<2.0	
		5/12/2016	Duplicate	<2.0	<1.0	<2.0	<1.0	<2.0	<5.0	<2.0	<5.0	<2.0
		5/13/2015	<2.0	<1.0	<2.0	<1.0	<2.0	NS	<2.0	<5.0	<2.0	
		8/15/2014	NS	NS	NS	NS	NS	NS	NS	NS	NS	
		2/15/2013	NS	NS	NS	NS	NS	NS	NS	NS	NS	
		12/8/2012	<0.50	<0.50	<0.50	<0.50	<0.50	NS	<0.50	NS	<0.50	
75 OLD ORCHARD ROAD	Annual	5/12/2016	<2.0	<1.0	<2.0	<1.0	<2.0	<5.0	<2.0	<5.0	<2.0	
		5/12/2016	Duplicate	<2.0	<1.0	<2.0	<1.0	<2.0	<5.0	<2.0	<5.0	<2.0
		8/15/2014	NS	NS	NS	NS	NS	NS	NS	NS	NS	
		2/21/2013	NS	NS	NS	NS	NS	NS	NS	NS	NS	
		12/6/2012	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
		6/21/2012	<0.50	<0.50	<0.50	<0.50	<0.50	NS	<0.50	NS	<0.50	
130 OLD ORCHARD ROAD	Annual	12/6/2012	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
		6/21/2012	<0.50	<0.50	<0.50	<0.50	<0.50	NS	<0.50	NS	<0.50	

Notes: GW-1 and GW-3 MCP Method 1 Standards
MMCL-Massachusetts Max. Contaminant Level
ORSG-Office of Research and Standards Guideline
NS - Not Sampled
J - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B - Analyte detected in Blank and Sample
* Residential samples will be tested for all VOCs during 2nd quarter of the year.



Property	LMP Sample Frequency	Date	1,3,5-Trimethylbenzene	1,3-Dichlorobenzene	1,3-Dichloropropane	1,4-Dichlorobenzene	2,2-Dichloropropane	2-Butanone (MEK)	2-Chlorotoluene	2-Hexanone	4-Chlorotoluene	
130A OLD ORCHARD ROAD	Annual	5/29/2015	<2.0	<1.0	<2.0	<1.0	<2.0	<5.0	<2.0	<5.0	<2.0	
		12/17/2014	NS	NS	NS	NS	NS	NS	NS		NS	
		12/18/2013	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<2.5	<0.50		<0.50
		2/25/2013	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<2.5	<0.50		<0.50
130B OLD ORCHARD ROAD	Annual	5/13/2016	<2.0	<1.0	<2.0	<1.0	<2.0	<5.0	<2.0	<5.0	<2.0	
		5/29/2015	<2.0	<1.0	<2.0	<1.0	<2.0	<5.0	<2.0	<5.0	<2.0	
		12/17/2014	NS	NS	NS	NS	NS	NS	NS		NS	
		12/18/2013	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<2.5	<0.50		<0.50
210 OLD ORCHARD ROAD	Annual	2/25/2013	NS	NS	NS	NS	NS	NS	NS		NS	
		5/13/2016	<2.0	<1.0	<2.0	<1.0	<2.0	<5.0	<2.0	<5.0	<2.0	
		12/18/2013	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<2.5	<0.50		<0.50
		2/15/2013	NS	NS	NS	NS	NS	NS	NS	NS		NS
290 OLD ORCHARD ROAD	Annual	12/6/2012	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		<0.50	
		6/21/2012	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NS	<0.50	NS	<0.50
		5/12/2016	<2.0	<1.0	<2.0	<1.0	<2.0	<5.0	<2.0	<5.0	<2.0	
		3/2/2015	<2.0	<1.0	<2.0	<1.0	<2.0	<5.0	<2.0	<5.0	<2.0	
290 OLD ORCHARD ROAD	Annual	3/2/2015	Inf.	<1.0	<2.0	<1.0	<2.0	<5.0	<2.0	<5.0	<2.0	
		7/23/2014	Eff.	<2.0	<1.0	<2.0	<1.0	<2.0	<5.0	<2.0	<5.0	<2.0
		5/16/2013		NS	NS	NS	NS	NS	NS	NS	NS	NS
		5/9/2013		NS	NS	NS	NS	NS	NS	NS	NS	NS
		2/15/2013		<0.50	<0.50	<0.50	<0.50	<0.50	<2.5	<0.50		<0.50
		6/21/2012		<0.50	<0.50	<0.50	<0.50	<0.50	<2.5	<0.50		<0.50

Notes: GW-1 and GW-3 MCP Method 1 Standards
MMCL-Massachusetts Max. Contaminant Level
ORSG-Office of Research and Standards Guideline
NS - Not Sampled
J - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B - Analyte detected in Blank and Sample
* Residential samples will be tested for all VOCs during 2nd quarter of the year.

3/23/2017

Page 5 of 5

Report: GW VOC 3

Datebase: Eastham Landfill Monitoring



TABLE 4.1
SECTION 4
SUMMARY OF LANDFILL MONITORING PLAN
GROUNDWATER ANALYTICAL RESULTS
Volatile Organic Compounds
Eastham Landfill Monitoring Wells and Private Drinking Wells
Eastham, MA
(All results in ug/l)

Property	LMP Sample Frequency	Date	4-Isopropyltoluene	4-Methyl-2-pentanone	Acetone	Benzene	Bromobenzene	Bromochloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon tetrachloride
Standards												
GW1			NA	350	6300	5	NA	NA	4	10	NA	5
GW3			NA	50000	50000	10000	NA	NA	50000	800	NA	5000
MMCL			NA	NA	NA	5	NA	NA	NA	NA	NA	5
ORSG			NA	350	6300	NA	NA	NA	NA	10	NA	NA
Results												
ESMW-1D		9/21/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
ESMW-1I		9/21/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
ESMW-1S		9/21/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
ESMW-2D		9/21/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
ESMW-2I		9/21/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
ESMW-2S		9/21/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
ESMW-3D		9/21/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
ESMW-3I		9/21/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
ESMW-3S		9/21/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
ESMW-4D		9/21/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
ESMW-4I		9/21/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW 2D		2/14/2013	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		12/6/2012	<0.50	<5.0	<5.0	<0.50	<0.50	<0.50	<0.50	<0.50	NS	<0.50
MW 2S	Annual	11/29/2016	<2.0	<5.0	<5.0	<0.50	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0
		11/24/2015	<2.0	<5.0	<5.0	<0.5	<2.0	<2.0	<2.0	<2.0	0.45J	<1.0
		12/16/2014	<2.0	<5.0	<5.0	<0.5	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0
		12/18/2013	<0.50	<5.0	<5.0	<0.50	<0.50	<0.50	<0.50	<0.50	NS	<0.50
		2/14/2013	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		12/6/2012	<0.50	<5.0	<5.0	<0.50	<0.50	<0.50	<0.50	<0.50	NS	<0.50
		7/10/2012	<0.50	<5.0	<5.0	<0.50	<0.50	<0.50	<0.50	<0.50	NS	<0.50

Notes: GW-1 and GW-3 MCP Method 1 Standards
MMCL-Massachusetts Max. Contaminant Level
ORSG-Office of Research and Standards Guideline
NS - Not Sampled
J - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B - Analyte detected in Blank and Sample
* Residential samples will be tested for all VOCs during 2nd quarter of the year.

3/23/2017 Page 1 of 5
Report: GW VOC 4
Datebase: Eastham Landfill Monitoring



Property	LMP Sample Frequency	Date	4-Isopropyltoluene	4-Methyl-2-pentanone	Acetone	Benzene	Bromobenzene	Bromochloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon tetrachloride	
MW 3D	Quarterly	3/1/2017	<2.0	<5.0	<5.0	0.64	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0	
		11/29/2016	<2.0	<5.0	<5.0	0.6	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0	
		8/10/2016	<2.0	<5.0	<5.0	0.58	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0
		5/18/2016	<2.0	<5.0	<5.0	0.58	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0
		2/23/2016	<2.0	<5.0	<5.0	0.64	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0
		11/24/2015	<2.0	<5.0	<5.0	0.69	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0
		8/26/2015	<2.0	<5.0	<5.0	0.76	<2.0	<2.0	<2.0	<2.0	0.30 J	<2.0	<1.0
		5/13/2015	<2.0	<5.0	<5.0	0.81	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0
		11/10/2014	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NS	<5.0
		11/10/2014	Duplicate	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NS	<5.0
		10/27/2014	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		9/3/2014	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NS	<5.0
		5/19/2014	<1.0	<5.0	<5.0	0.79	<1.0	<1.0	<1.0	<1.0	<1.0	NS	<1.0
		2/27/2014	<1.0	<5.0	<10	1.2	<1.0	<1.0	<1.0	<1.0	<1.0	NS	<1.0
		11/25/2013	<0.50	<5.0	<5.0	0.96	<0.50	<0.50	<0.50	<0.50	<0.50	NS	<0.50
		9/5/2013	<0.50	<5.0	<5.0	1.0	<0.50	<0.50	<0.50	<0.50	<0.50	NS	<0.50
		5/8/2013	<0.50	<5.0	<5.0	0.91	<0.50	<0.50	<0.50	<0.50	<0.50	NS	<0.50
		2/14/2013	<0.50	<5.0	<5.0	1.0	<0.50	<0.50	<0.50	<0.50	<0.50	NS	<0.50
		12/6/2012	<0.50	<5.0	<5.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NS	<0.50
		10/9/2012	<0.50	<5.0	<5.0	1.2	<0.50	<0.50	<0.50	<0.50	<0.50	NS	<0.50
7/10/2012	<0.50	<5.0	<5.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NS	<0.50		
3/20/2012	<0.50	<5.0	<5.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NS	<0.50		
MW 3I	Quarterly	3/1/2017	<2.0	<5.0	<5.0	<0.50	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0	
		11/29/2016	<2.0	<5.0	<5.0	<0.50	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0
		8/10/2016	<2.0	<5.0	<5.0	<0.50	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0
		5/18/2016	<2.0	<5.0	<5.0	<0.5	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0
		2/23/2016	<2.0	<5.0	<5.0	<0.5	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0
		11/24/2015	<2.0	<5.0	1.8J	<0.5	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0
		8/26/2015	<2.0	<5.0	<5.0	<0.5	<2.0	<2.0	<2.0	<2.0	0.35 J	<2.0	<1.0
		5/13/2015	<2.0	<5.0	<5.0	<0.5	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0
		12/16/2014	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		11/10/2014	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NS	<5.0
		9/3/2014	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NS	<5.0
		5/19/2014	<1.0	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NS	<1.0
		2/27/2014	<1.0	<5.0	<10	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NS	<1.0
		11/25/2013	<0.50	<5.0	<5.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NS	<0.50
		9/5/2013	<0.50	<5.0	<5.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NS	<0.50
		5/8/2013	<0.50	<5.0	<5.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NS	<0.50
		2/14/2013	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2/14/2013	<0.50	<5.0	<5.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NS	<0.50		
12/6/2012	<0.50	<5.0	<5.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NS	<0.50		

Notes: GW-1 and GW-3 MCP Method 1 Standards
MMCL-Massachusetts Max. Contaminant Level
ORSG-Office of Research and Standards Guideline
NS - Not Sampled
J - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B - Analyte detected in Blank and Sample
* Residential samples will be tested for all VOCs during 2nd quarter of the year.

Property	LMP Sample Frequency	Date	4-Isopropyltoluene	4-Methyl-2-pentanone	Acetone	Benzene	Bromobenzene	Bromochloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon tetrachloride	
MW 3I	Quarterly	10/9/2012	<0.50	<5.0	<5.0	<0.50	<0.50	<0.50	<0.50	<0.50	NS	<0.50	
		7/10/2012	<0.50	<5.0	<5.0	<0.50	<0.50	<0.50	<0.50	<0.50	NS	<0.50	
		3/20/2012	<0.50	<5.0	<5.0	<0.50	<0.50	<0.50	<0.50	<0.50	NS	<0.50	
MW 3S		2/14/2013	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
		12/6/2012	<0.50	<5.0	<5.0	<0.50	<0.50	<0.50	<0.50	<0.50	NS	<0.50	
MW 4D		10/27/2014	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
		2/14/2013	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
		12/6/2012	<0.50	<5.0	<5	<0.50	<0.50	<0.50	<0.50	<0.50	NS	<0.50	
MW 4S	Annual	11/29/2016	<2.0	<5.0	<5.0	<0.50	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0
		11/24/2015	<2.0	<5.0	<5.0	<0.5	<2.0	<2.0	<2.0	<2.0	0.30J	<2.0	<1.0
		12/16/2014	<2.0	<5.0	<5.0	<0.5	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0
		10/27/2014	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		12/18/2013	<0.50	<5.0	<5.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NS	<0.50
		2/14/2013	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		12/6/2012	<0.50	<5.0	<5.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NS	<0.50
		7/10/2012	<0.50	<5.0	<5.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NS	<0.50
MW 5D		10/27/2014	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
		2/14/2013	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
		12/5/2012	<0.50	<5.0	<5.0	<0.50	<0.50	<0.50	<0.50	<0.50	NS	<0.50	
MW 5S	Annual	11/29/2016	<2.0	<5.0	<5.0	<0.50	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0
		11/24/2015	<2.0	<5.0	<5.0	0.21J	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0
		12/16/2014	<2.0	<5.0	<5.0	0.20J	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0
		10/27/2014	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		12/18/2013	<0.50	<5.0	<5.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NS	<0.50
		2/14/2013	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		12/5/2012	<0.50	<5.0	<5.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NS	<0.50
		7/10/2012	<0.50	<5.0	<5.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NS	<0.50
MW 7		10/27/2014	NS	NS	NS	NS	NS	NS	NS	NS	NS		
MW 8	Annual	11/29/2016	<2.0	<5.0	<5.0	<0.50	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0
		11/24/2015	<2.0	<5.0	<5.0	<0.5	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0
		12/16/2014	<2.0	<5.0	<5.0	<0.5	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0
		12/18/2013	<0.50	<5.0	<5.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NS	<0.50
		3/14/2013	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		12/7/2012	<0.50	NS	NS	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NS	<0.50
MW 10		10/27/2014	NS	NS	NS	NS	NS	NS	NS	NS	NS		
MW 21D		10/27/2014	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
		2/25/2013	<1.0	<10	14J	<1.0	<1.0	<1.0	<1.0	<2.0	NS	<1.0	
MW 21S	Semi-Annual	11/10/2015	<2.0	<5.0	1.6J	<0.50	<2.0	<2.0	<2.0	<2.0	0.42J	<1.0	
		5/13/2015	<2.0	<5.0	<5.0	0.33J	<2.0	<2.0	<2.0	<2.0	1.0J	<1.0	

Notes: GW-1 and GW-3 MCP Method 1 Standards
MMCL-Massachusetts Max. Contaminant Level
ORSG-Office of Research and Standards Guideline
NS - Not Sampled
J - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B - Analyte detected in Blank and Sample
* Residential samples will be tested for all VOCs during 2nd quarter of the year.



Property	LMP Sample Frequency	Date	4-Isopropyltoluene	4-Methyl-2-pentanone	Acetone	Benzene	Bromobenzene	Bromochloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon tetrachloride	
MW 21S	Semi-Annual	10/27/2014	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
		5/16/2013	<1.0	<10	< 50	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	NS	<1.0
		12/7/2012	<0.50	NS	NS	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NS	<0.50
DPW WELL	Annual	11/29/2016	<2.0	<5.0	<5.0	<0.50	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0	
		11/24/2015	<2.0	<5.0	2.1J	<0.5	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0	
		12/16/2014	<2.0	<5.0	<5.0	<0.5	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0
265 ALSTON AVENUE	Annual	5/12/2016	<2.0	<5.0	<5.0	<0.5	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0	
		5/12/2016	Duplicate	<2.0	<5.0	<5.0	<0.5	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0
		4/1/2015	<2.0	<5.0	<5.0	<0.50	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0
		3/28/2014	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		12/18/2013	<0.50	<2.5	0.75J	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NS	<0.50
		3/14/2013	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		12/6/2012	<0.50			<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NS	<0.50
6/21/2012	<0.50	NS	NS	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NS	<0.50		
280 ALSTON AVENUE	Annual	5/12/2016	<2.0	<5.0	<5.0	<0.5	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0	
		5/13/2015	<2.0	<5.0	<5.0	<0.50	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0	
		12/17/2014	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		12/18/2013	<0.50	<2.5	<2.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NS	<0.50
		2/22/2013	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		12/6/2012	<0.50	NS	NS	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NS	<0.50
		6/21/2012	<0.50	NS	NS	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NS	<0.50
125 MEETINGHOUSE	Annual	7/21/2016	<2.0	<5.0	1.6J	<0.50	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0	
		7/21/2016	Duplicate	<2.0	<5.0	1.8J	<0.50	<2.0	<2.0	<2.0	<2.0	<1.0	
		5/8/2013	<0.50	<2.5	<2.5	<0.50	<0.50	<0.50	<0.50	<0.50	NS	<0.50	
		6/21/2012	<0.50	NS	NS	<0.50	<0.50	<0.50	<0.50	<0.50	NS	<0.50	
170 MEETINGHOUSE	Annual	5/12/2016	<2.0	<5.0	<5.0	<0.5	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0	
		5/12/2016	Duplicate	<2.0	<5.0	<5.0	<0.5	<2.0	<2.0	<2.0	<2.0	<1.0	
		5/13/2015	<2.0	<5.0	<5.0	<0.50	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0	
		8/15/2014	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
		2/15/2013	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
12/8/2012	<0.50	NS	NS	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NS	<0.50		
75 OLD ORCHARD	Annual	5/12/2016	<2.0	<5.0	<5.0	<0.5	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0	
		5/12/2016	Duplicate	<2.0	<5.0	<5.0	<0.5	<2.0	<2.0	<2.0	<2.0	<1.0	
		8/15/2014	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
		2/21/2013	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
		12/6/2012	<0.50			<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NS	<0.50
6/21/2012	<0.50	NS	NS	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NS	<0.50		
130 OLD ORCHARD	Annual	12/6/2012	<0.50			<0.50	<0.50	<0.50	<0.50	<0.50	NS	<0.50	
		6/21/2012	<0.50	NS	NS	<0.50	<0.50	<0.50	<0.50	<0.50	NS	<0.50	

Notes: GW-1 and GW-3 MCP Method 1 Standards
MMCL-Massachusetts Max. Contaminant Level
ORSG-Office of Research and Standards Guideline
NS - Not Sampled
J - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B - Analyte detected in Blank and Sample
* Residential samples will be tested for all VOCs during 2nd quarter of the year.



Property	LMP Sample Frequency	Date	4-Isopropyltoluene	4-Methyl-2-pentanone	Acetone	Benzene	Bromobenzene	Bromochloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon tetrachloride	
130A OLD ORCHARD	Annual	5/29/2015	<2.0	<5.0	<5.0	<0.5	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0	
		12/17/2014	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
		12/18/2013	<0.50	<2.5	1.9J	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NS	<0.50
		2/25/2013	<0.50	<2.5	<2.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NS	<0.50
130B OLD ORCHARD	Annual	5/13/2016	<2.0	<5.0	<5.0	<0.50	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0	
		5/29/2015	<2.0	<5.0	<5.0	<0.5	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0	
		12/17/2014	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
		12/18/2013	<0.50	<2.5	<2.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NS	<0.50
210 OLD ORCHARD	Annual	2/25/2013	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
		5/13/2016	<2.0	<5.0	<5.0	<0.50	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0	
		12/18/2013	<0.50	<2.5	<2.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NS	<0.50
		2/15/2013	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
290 OLD ORCHARD	Annual	12/6/2012	<0.50			<0.50	<0.50	<0.50	<0.50	<0.50	NS	<0.50	
		6/21/2012	<0.50	NS	NS	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NS	<0.50
		5/12/2016	<2.0	<5.0	<5.0	<0.5	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0
		3/2/2015	Inf.	<2.0	<5.0	<5.0	<0.50	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0
290 OLD ORCHARD	Annual	3/2/2015	Eff.	<2.0	<5.0	<5.0	<0.50	<2.0	<2.0	<2.0	<2.0	<1.0	
		7/23/2014		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		5/16/2013		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		5/9/2013		<0.50	<2.5	<2.5	<0.50	<0.50	<0.50	<0.50	<0.50	NS	<0.50
		2/15/2013		<0.50	<2.5	<2.5	<0.50	<0.50	<0.50	<0.50	<0.50	NS	<0.50
		6/21/2012		<0.50	NS	NS	<0.50	<0.50	<0.50	<0.50	<0.50	NS	<0.50

Notes: GW-1 and GW-3 MCP Method 1 Standards
MMCL-Massachusetts Max. Contaminant Level
ORSG-Office of Research and Standards Guideline
NS - Not Sampled
J - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B - Analyte detected in Blank and Sample
* Residential samples will be tested for all VOCs during 2nd quarter of the year.



TABLE 4.1
SECTION 5
SUMMARY OF LANDFILL MONITORING PLAN
GROUNDWATER ANALYTICAL RESULTS
Volatile Organic Compounds
Eastham Landfill Monitoring Wells and Private Drinking Wells
Eastham, MA
(All results in ug/l)

Property	LMP Sample Frequency	Date	Chlorobenzene	Chlorodibromomethane	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromomethane
Standards										
GW1			100	2	NA	70	NA	70	NA	NA
GW3			1000	50000	NA	20000	NA	50000	NA	NA
MMCL			100	NA	NA	NA	NA	70	NA	NA
ORSG			NA	NA	NA	70	NA	NA	NA	NA
Results										
ESMW-1D		9/21/2016	NS	NS	NS	NS	NS	NS	NS	NS
ESMW-1I		9/21/2016	NS	NS	NS	NS	NS	NS	NS	NS
ESMW-1S		9/21/2016	NS	NS	NS	NS	NS	NS	NS	NS
ESMW-2D		9/21/2016	NS	NS	NS	NS	NS	NS	NS	NS
ESMW-2I		9/21/2016	NS	NS	NS	NS	NS	NS	NS	NS
ESMW-2S		9/21/2016	NS	NS	NS	NS	NS	NS	NS	NS
ESMW-3D		9/21/2016	NS	NS	NS	NS	NS	NS	NS	NS
ESMW-3I		9/21/2016	NS	NS	NS	NS	NS	NS	NS	NS
ESMW-3S		9/21/2016	NS	NS	NS	NS	NS	NS	NS	NS
ESMW-4D		9/21/2016	NS	NS	NS	NS	NS	NS	NS	NS
ESMW-4I		9/21/2016	NS	NS	NS	NS	NS	NS	NS	NS
MW 2D		2/14/2013	NS	NS	NS	NS	NS	NS	NS	NS
		12/6/2012	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
MW 2S	Annual	11/29/2016	<1.0	<1.0	<2.0	<1.0	<2.0	<1.0	<0.50	<2.0
		11/24/2015	<1.0	<1.0	<2.0	<1.0	<2.0	0.36J	<0.5	<2.0
		12/16/2014	<1.0	<1.0	<2.0	<1.0	<2.0	0.20J	<0.5	<2.0
		12/18/2013	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
		2/14/2013	NS	NS	NS	NS	NS	NS	NS	NS
		12/6/2012	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50

Notes: GW-1 and GW-3 MCP Method 1 Standards
MMCL-Massachusetts Max. Contaminant Level
ORSG-Office of Research and Standards Guideline
NS - Not Sampled
J - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B - Analyte detected in Blank and Sample
* Residential samples will be tested for all VOCs during 2nd quarter of the year.



Property	LMP Sample Frequency	Date	Chlorobenzene	Chlorodibromomethane	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromomethane
MW 2S	Annual	7/10/2012	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
MW 3D	Quarterly	3/1/2017	<1.0	<1.0	<2.0	<1.0	<2.0	1.3	<0.50	<2.0
		11/29/2016	<1.0	<1.0	<2.0	<1.0	<2.0	1.2	<0.50	<2.0
		8/10/2016	0.80J	<1.0	<2.0	<1.0	<2.0	1.3	<0.50	<2.0
		5/18/2016	0.72J	<1.0	<2.0	<1.0	<2.0	1.3	<0.5	<2.0
		2/23/2016	0.81J	<1.0	<2.0	<1.0	<2.0	1.2	<0.5	<2.0
		11/24/2015	1.0	<1.0	<2.0	<1.0	<2.0	1.5	<0.5	<2.0
		8/26/2015	0.93 J	<1.0	<2.0	<1.0	<2.0	1.4	<0.5	<2.0
		5/13/2015	1.0	<1.0	0.38J	<1.0	<2.0	1.4	<0.5	<2.0
		11/10/2014	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
		11/10/2014	Duplicate	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
		10/27/2014	NS	NS	NS	NS	NS	NS	NS	NS
		9/3/2014	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
		5/19/2014	1.3	<5.0	<1.0	<1.0	<1.0	1.1	<0.50	<1.0
		2/27/2014	1.6	<5.0	<1.0	<1.0	<1.0	2.0	<0.50	<1.0
		11/25/2013	<0.50	<0.50	1.3	<0.50	1.4	<0.50	<0.50	<0.50
		9/5/2013	1.6	<0.50	<0.50	<0.50	<0.50	1.6	<0.50	<0.50
		5/8/2013	1.4	<0.50	<0.50	<0.50	<0.50	1.1	<0.50	<0.50
		2/14/2013	1.6	<0.50	<0.50	<0.50	<0.50	1.5	<0.50	<0.50
		12/6/2012	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
		10/9/2012	1.9	<0.50	0.58	<0.50	<0.50	1.3	<0.50	<0.50
7/10/2012	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		
3/20/2012	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		
MW 3I	Quarterly	3/1/2017	<1.0	<1.0	<2.0	<1.0	<2.0	<1.0	<0.50	<2.0
		11/29/2016	<1.0	<1.0	<2.0	<1.0	<2.0	<1.0	<0.50	<2.0
		8/10/2016	0.31J	<1.0	<2.0	<1.0	<2.0	0.35J	<0.50	<2.0
		5/18/2016	0.28J	<1.0	<2.0	<1.0	<2.0	0.35J	<0.5	<2.0
		2/23/2016	0.27J	<1.0	<2.0	<1.0	<2.0	0.29J	<0.5	<2.0
		11/24/2015	0.37J	<1.0	<2.0	<1.0	<2.0	<1.0	<0.5	<2.0
		8/26/2015	0.32 J	<1.0	<2.0	<1.0	<2.0	0.30 J	<0.5	<2.0
		5/13/2015	0.30J	<1.0	<2.0	<1.0	<2.0	0.28J	<0.5	<2.0
		12/16/2014	NS	NS	NS	NS	NS	NS	NS	NS
		11/10/2014	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
		9/3/2014	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
		5/19/2014	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<0.50	<1.0
		2/27/2014	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<0.50	<1.0
		11/25/2013	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
9/5/2013	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		

Notes: GW-1 and GW-3 MCP Method 1 Standards
MMCL-Massachusetts Max. Contaminant Level
ORSG-Office of Research and Standards Guideline
NS - Not Sampled
J - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B - Analyte detected in Blank and Sample
* Residential samples will be tested for all VOCs during 2nd quarter of the year.



Property	LMP Sample Frequency	Date	Chlorobenzene	Chlorodibromomethane	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromomethane
MW 3I	Quarterly	5/8/2013	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
		2/14/2013	NS	NS	NS	NS	NS	NS	NS	NS
		2/14/2013	<0.50	<0.50	<0.50	<0.50	<0.50	0.84	<0.50	<0.50
		12/6/2012	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
		10/9/2012	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
		7/10/2012	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
		3/20/2012	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
MW 3S		2/14/2013	NS	NS	NS	NS	NS	NS	NS	NS
		12/6/2012	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
MW 4D		10/27/2014	NS	NS	NS	NS	NS	NS	NS	NS
		2/14/2013	NS	NS	NS	NS	NS	NS	NS	NS
		12/6/2012	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
MW 4S	Annual	11/29/2016	<1.0	<1.0	<2.0	<1.0	<2.0	<1.0	<0.50	<2.0
		11/24/2015	0.38J	<1.0	<2.0	<1.0	<2.0	0.40J	<0.5	<2.0
		12/16/2014	0.41J	<1.0	0.26J	<1.0	<2.0	0.28J	<0.5	<2.0
		10/27/2014	NS	NS	NS	NS	NS	NS	NS	NS
		12/18/2013	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
		2/14/2013	NS	NS	NS	NS	NS	NS	NS	NS
		12/6/2012	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
7/10/2012	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		
MW 5D		10/27/2014	NS	NS	NS	NS	NS	NS	NS	NS
		2/14/2013	NS	NS	NS	NS	NS	NS	NS	NS
		12/5/2012	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
MW 5S	Annual	11/29/2016	<1.0	<1.0	<2.0	<1.0	<2.0	<1.0	<0.50	<2.0
		11/24/2015	0.41J	<1.0	<2.0	<1.0	<2.0	0.57J	<0.5	<2.0
		12/16/2014	0.29J	<1.0	<2.0	<1.0	<2.0	0.50J	<0.5	<2.0
		10/27/2014	NS	NS	NS	NS	NS	NS	NS	NS
		12/18/2013	<0.50	<0.50	<0.50	<0.50	<0.50	0.51	<0.50	<0.50
		2/14/2013	NS	NS	NS	NS	NS	NS	NS	NS
		12/5/2012	<0.50	<0.50	<0.50	<0.50	<0.50	0.51	<0.50	<0.50
7/10/2012	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		
MW 7		10/27/2014	NS	NS	NS	NS	NS	NS	NS	
MW 8	Annual	11/29/2016	<1.0	<1.0	<2.0	<1.0	<2.0	<1.0	<0.50	<2.0
		11/24/2015	<1.0	<1.0	<2.0	0.28J	<2.0	<1.0	<0.5	<2.0
		12/16/2014	<1.0	<1.0	<2.0	0.22J	<2.0	<1.0	<0.5	<2.0
		12/18/2013	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
		3/14/2013	NS	NS	NS	NS	NS	NS	NS	NS

Notes: GW-1 and GW-3 MCP Method 1 Standards
MMCL-Massachusetts Max. Contaminant Level
ORSG-Office of Research and Standards Guideline
NS - Not Sampled
J - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B - Analyte detected in Blank and Sample
* Residential samples will be tested for all VOCs during 2nd quarter of the year.



Property	LMP Sample Frequency	Date	Chlorobenzene	Chlorodibromomethane	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromomethane
MW 8	Annual	12/7/2012	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
MW 10		10/27/2014	NS	NS	NS	NS	NS	NS	NS	NS
MW 21D		10/27/2014	NS	NS	NS	NS	NS	NS	NS	NS
		2/25/2013	<1.0	<0.50	<2.0	<1.0	<2.0	<1.0	< 0.40	<1.0
MW 21S	Semi-Annual	11/10/2015	<1.0	<1.0	<2.0	<1.0	<2.0	<1.0	<0.50	<2.0
		5/13/2015	<1.0	<1.0	<2.0	<1.0	<2.0	0.37J	<0.50	<2.0
		10/27/2014	NS	NS	NS	NS	NS	NS	NS	NS
		5/16/2013	<1.0	<0.50	<2.0	<1.0	<2.0	<1.0	< 0.40	<1.0
		12/7/2012	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
DPW WELL	Annual	11/29/2016	<1.0	<1.0	<2.0	<1.0	<2.0	<1.0	<0.50	<2.0
		11/24/2015	<1.0	<1.0	<2.0	<1.0	<2.0	<1.0	<0.5	<2.0
		12/16/2014	<1.0	<1.0	<2.0	<1.0	<2.0	<1.0	<0.5	<2.0
265 ALSTON AVENUE	Annual	5/12/2016	<1.0	<1.0	<2.0	<1.0	<2.0	<1.0	<0.5	<2.0
		5/12/2016	Duplicate	<1.0	<2.0	<1.0	<2.0	<1.0	<0.5	<2.0
		4/1/2015	<1.0	<1.0	<2.0	0.17J	<2.0	<1.0	<0.50	<2.0
		3/28/2014	NS	NS	NS	NS	NS	NS	NS	NS
		12/18/2013	<0.50	<0.50	<0.50	0.18J	<0.50	<0.50	<0.50	<0.50
		3/14/2013	NS	NS	NS	NS	NS	NS	NS	NS
		12/6/2012	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
		6/21/2012	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
280 ALSTON AVENUE	Annual	5/12/2016	<1.0	<1.0	<2.0	<1.0	<2.0	<1.0	<0.5	<2.0
		5/13/2015	<1.0	<1.0	<2.0	<1.0	<2.0	<1.0	<0.50	<2.0
		12/17/2014	NS	NS	NS	NS	NS	NS	NS	NS
		12/18/2013	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
		2/22/2013	NS	NS	NS	NS	NS	NS	NS	NS
		12/6/2012	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
		6/21/2012	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
125 MEETINGHOUSE ROAD	Annual	7/21/2016	<1.0	<1.0	<2.0	<1.0	<2.0	<1.0	<0.50	<2.0
		7/21/2016	Duplicate	<1.0	<2.0	<1.0	<2.0	<1.0	<0.50	<2.0
		5/8/2013	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
		6/21/2012	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
170 MEETINGHOUSE ROAD	Annual	5/12/2016	<1.0	<1.0	<2.0	0.18J	<2.0	<1.0	<0.5	<2.0
		5/12/2016	Duplicate	<1.0	<2.0	0.16J	<2.0	<1.0	<0.5	<2.0
		5/13/2015	<1.0	<1.0	<2.0	0.36J	<2.0	<1.0	<0.50	<2.0
		8/15/2014	NS	NS	NS	NS	NS	NS	NS	NS
		2/15/2013	NS	NS	NS	NS	NS	NS	NS	NS
		12/8/2012	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50

Notes: GW-1 and GW-3 MCP Method 1 Standards
MMCL-Massachusetts Max. Contaminant Level
ORSG-Office of Research and Standards Guideline
NS - Not Sampled
J - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B - Analyte detected in Blank and Sample
* Residential samples will be tested for all VOCs during 2nd quarter of the year.



Property	LMP Sample Frequency	Date		Chlorobenzene	Chlorodibromomethane	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromomethane
75 OLD ORCHARD ROAD	Annual	5/12/2016		<1.0	<1.0	<2.0	1.0	<2.0	<1.0	<0.5	<2.0
		5/12/2016	Duplicate	<1.0	<1.0	<2.0	0.98J	<2.0	<1.0	<0.5	<2.0
		8/15/2014		NS	NS	NS	NS	NS	NS	NS	NS
		2/21/2013		NS	NS	NS	NS	NS	NS	NS	NS
		12/6/2012		<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
		6/21/2012		<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
130 OLD ORCHARD ROAD	Annual	12/6/2012		<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
		6/21/2012		<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
130A OLD ORCHARD ROAD	Annual	5/29/2015		<1.0	<1.0	<2.0	<1.0	<2.0	<1.0	<0.5	<2.0
		12/17/2014		NS	NS	NS	NS	NS	NS	NS	NS
		12/18/2013		<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
		2/25/2013		<0.50	<0.50	<0.50	<0.50	0.13J	<0.50	<0.50	<0.50
130B OLD ORCHARD ROAD	Annual	5/13/2016		<1.0	<1.0	<2.0	<1.0	<2.0	<1.0	<0.50	<2.0
		5/29/2015		<1.0	<1.0	<2.0	<1.0	<2.0	<1.0	<0.5	<2.0
		12/17/2014		NS	NS	NS	NS	NS	NS	NS	NS
		12/18/2013		<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
		2/25/2013		NS	NS	NS	NS	NS	NS	NS	NS
210 OLD ORCHARD ROAD	Annual	5/13/2016		<1.0	<1.0	<2.0	0.25J	<2.0	<1.0	<0.50	<2.0
		12/18/2013		<0.50	<0.50	<0.50	0.19J	<0.50	<0.50	<0.50	<0.50
		2/15/2013		NS	NS	NS	NS	NS	NS	NS	NS
		12/6/2012		<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
		6/21/2012		<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
290 OLD ORCHARD ROAD	Annual	5/12/2016		<1.0	<1.0	<2.0	<1.0	<2.0	<1.0	<0.5	<2.0
		3/2/2015	Inf.	<1.0	<1.0	<2.0	0.46J	<2.0	<1.0	<0.50	<2.0
		3/2/2015	Eff.	<1.0	<1.0	<2.0	0.18J	<2.0	<1.0	<0.50	<2.0
		7/23/2014		NS	NS	NS	NS	NS	NS	NS	NS
		5/16/2013		NS	NS	NS	NS	NS	NS	NS	NS
		5/9/2013		<0.50	<0.50	<0.50	0.25J	<0.50	<0.50	<0.50	<0.50
		2/15/2013		<0.50	<0.50	<0.50	0.38J	0.099J	<0.50	<0.50	<0.50
		6/21/2012		<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50

Notes: GW-1 and GW-3 MCP Method 1 Standards
MMCL-Massachusetts Max. Contaminant Level
ORSG-Office of Research and Standards Guideline
NS - Not Sampled
J - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B - Analyte detected in Blank and Sample
* Residential samples will be tested for all VOCs during 2nd quarter of the year.

TABLE 4.1
SECTION 6
SUMMARY OF LANDFILL MONITORING PLAN
GROUNDWATER ANALYTICAL RESULTS
Volatile Organic Compounds
Eastham Landfill Monitoring Wells and Private Drinking Wells
Eastham, MA
(All results in ug/l)

Property	LMP Sample Frequency	Date	Dichlorobromomethane	Dichlorodifluoromethane	Ethylbenzene	Ethyl Ether	ETBE	Hexachlorobutadiene	Isopropylbenzene	Methyl tert-butyl ether	Methylene Chloride
Standards											
GW1			3	NA	700	NA	NA	0.6	NA	70	5
GW3			50000	NA	5000	NA	NA	3000	NA	50000	50000
MMCL			NA	NA	700	NA	NA	NA	NA	NA	5
ORSG			NA	1400	NA	NA	NA	NA	NA	70	NA
Results											
ESMW-1D		9/21/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS
ESMW-1I		9/21/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS
ESMW-1S		9/21/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS
ESMW-2D		9/21/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS
ESMW-2I		9/21/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS
ESMW-2S		9/21/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS
ESMW-3D		9/21/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS
ESMW-3I		9/21/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS
ESMW-3S		9/21/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS
ESMW-4D		9/21/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS
ESMW-4I		9/21/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW 2D		2/14/2013	NS	NS	NS	NS	NS	NS	NS	NS	NS
		12/6/2012	<0.50	<0.50	<0.50	NS	NS	<0.50	<0.50	<0.50	<0.50
MW 2S	Annual	11/29/2016	<1.0	<2.0	<1.0	<2.0	<2.0	<0.60	<2.0	<2.0	<2.0
		11/24/2015	<1.0	<2.0	<1.0	1.4J	<2.0	<0.6	<2.0	<2.0	<2.0
		12/16/2014	<1.0	<2.0	<1.0	0.82J	<2.0	< 0.6	<2.0	<2.0	<2.0
		12/18/2013	<0.50	<0.50	<0.50	NS	NS	<0.50	<0.50	<0.50	<0.50
		2/14/2013	NS	NS	NS	NS	NS	NS	NS	NS	NS
		12/6/2012	<0.50	<0.50	<0.50	NS	NS	<0.50	<0.50	<0.50	<0.50

Notes: GW-1 and GW-3 MCP Method 1 Standards
MMCL-Massachusetts Max. Contaminant Level
ORSG-Office of Research and Standards Guideline
NS - Not Sampled
J - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B - Analyte detected in Blank and Sample
* Residential samples will be tested for all VOCs during 2nd quarter of the year.



Property	LMP Sample Frequency	Date	Dichlorobromomethane	Dichlorodifluoromethane	Ethylbenzene	Ethyl Ether	ETBE	Hexachlorobutadiene	Isopropylbenzene	Methyl tert-butyl ether	Methylene Chloride	
MW 2S	Annual	7/10/2012	<0.50	<0.50	<0.50	NS	NS	<0.50	<0.50	<0.50	<0.50	
MW 3D	Quarterly	3/1/2017	<1.0	<2.0	<1.0	19	<2.0	<0.60	<2.0	<2.0	<2.0	
		11/29/2016	<1.0	<2.0	<1.0	19	<2.0	<0.60	<2.0	<2.0	<2.0	
		8/10/2016	<1.0	<2.0	<1.0	19	<2.0	<0.60	<2.0	0.74J	<2.0	
		5/18/2016	<1.0	0.28J	<1.0	17	<2.0	<0.6	<2.0	0.55J	<2.0	
		2/23/2016	<1.0	<2.0	<1.0	18	<2.0	<0.6	<2.0	0.58J	<2.0	
		11/24/2015	<1.0	<2.0	<1.0	20	<2.0	<0.6	<2.0	0.94J	<2.0	
		8/26/2015	<1.0	<2.0	<1.0	24	<2.0	<0.6	<2.0	0.89 J	<2.0	
		5/13/2015	<1.0	<2.0	<1.0	26	<2.0	<0.6	<2.0	0.63J	<2.0	
		11/10/2014	<5.0	<5.0	<5.0	NS	NS	<5.0	<5.0	<5.0	<5.0	
		11/10/2014	Duplicate	<5.0	<5.0	<5.0	NS	NS	<5.0	<5.0	<5.0	<5.0
		10/27/2014	NS	NS	NS	NS	NS	NS	NS	NS	NS	
		9/3/2014	<5.0	<5.0	<5.0	NS	NS	<5.0	<5.0	<5.0	<5.0	
		5/19/2014	<1.0	<1.0	<1.0	NS	NS	<0.50	<1.0	0.95	<5.0	
		2/27/2014	<1.0	<1.0	<1.0	NS	NS	<0.50	<1.0	1.2	<5.0	
		11/25/2013	<0.50	<0.50	<0.50	NS	NS	<0.50	<0.50	<0.50	0.92	
		9/5/2013	<0.50	<0.50	<0.50	NS	NS	<0.50	<0.50	0.95	<0.50	
		5/8/2013	<0.50	0.60	<0.50	NS	NS	<0.50	<0.50	1.1	<0.50	
		2/14/2013	<0.50	0.51	<0.50	NS	NS	<0.50	<0.50	1.2	<0.50	
		12/6/2012	<0.50	<0.50	<0.50	NS	NS	<0.50	<0.50	<0.50	<0.50	
		10/9/2012	<0.50	<0.50	<0.50	NS	NS	<0.50	<0.50	1.6	<0.50	
7/10/2012	<0.50	<0.50	<0.50	NS	NS	<0.50	<0.50	<0.50	<0.50			
3/20/2012	<0.50	<0.50	<0.50	NS	NS	<0.50	<0.50	<0.50	<0.50			
MW 3I	Quarterly	3/1/2017	<1.0	<2.0	<1.0	<2.0	<2.0	<0.60	<2.0	<2.0	<2.0	
		11/29/2016	<1.0	<2.0	<1.0	<2.0	<2.0	<0.60	<2.0	<2.0	<2.0	
		8/10/2016	<1.0	<2.0	<1.0	0.35J	<2.0	<0.60	<2.0	<2.0	<2.0	
		5/18/2016	<1.0	<2.0	<1.0	0.24J	<2.0	<0.6	<2.0	<2.0	<2.0	
		2/23/2016	<1.0	<2.0	<1.0	0.22J	<2.0	<0.6	<2.0	<2.0	<2.0	
		11/24/2015	<1.0	<2.0	<1.0	<2.0	<2.0	<0.6	<2.0	<2.0	<2.0	
		8/26/2015	<1.0	<2.0	<1.0	0.24 J	<2.0	<0.6	<2.0	<2.0	<2.0	
		5/13/2015	<1.0	<2.0	<1.0	0.18J	<2.0	<0.6	<2.0	<2.0	<2.0	
		12/16/2014	NS	NS	NS	NS	NS	NS	NS	NS	NS	
		11/10/2014	<5.0	<5.0	<5.0	NS	NS	<5.0	<5.0	<5.0	<5.0	
		9/3/2014	<5.0	<5.0	<5.0	NS	NS	<5.0	<5.0	<5.0	<5.0	
		5/19/2014	<1.0	<1.0	<1.0	NS	NS	<0.50	<1.0	<1.0	<5.0	
		2/27/2014	<1.0	<1.0	<1.0	NS	NS	<0.50	<1.0	<1.0	<5.0	
		11/25/2013	<0.50	<0.50	<0.50	NS	NS	<0.50	<0.50	<0.50	<0.50	
		9/5/2013	<0.50	<0.50	<0.50	NS	NS	<0.50	<0.50	<0.50	<0.50	

Notes: GW-1 and GW-3 MCP Method 1 Standards
MMCL-Massachusetts Max. Contaminant Level
ORSG-Office of Research and Standards Guideline
NS - Not Sampled
J - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B - Analyte detected in Blank and Sample
* Residential samples will be tested for all VOCs during 2nd quarter of the year.



Property	LMP Sample Frequency	Date	Dichlorobromomethane	Dichlorodifluoromethane	Ethylbenzene	Ethyl Ether	ETBE	Hexachlorobutadiene	Isopropylbenzene	Methyl tert-butyl ether	Methylene Chloride
MW 3I	Quarterly	5/8/2013	<0.50	<0.50	<0.50	NS	NS	<0.50	<0.50	<0.50	<0.50
		2/14/2013	NS	NS	NS	NS	NS	NS	NS	NS	NS
		2/14/2013	<0.50	<0.50	<0.50	NS	NS	<0.50	<0.50	<0.50	<0.50
		12/6/2012	<0.50	<0.50	<0.50	NS	NS	<0.50	<0.50	<0.50	<0.50
		10/9/2012	<0.50	<0.50	<0.50	NS	NS	<0.50	<0.50	<0.50	<0.50
		7/10/2012	<0.50	<0.50	<0.50	NS	NS	<0.50	<0.50	<0.50	<0.50
		3/20/2012	<0.50	<0.50	<0.50	NS	NS	<0.50	<0.50	<0.50	<0.50
MW 3S		2/14/2013	NS	NS	NS	NS	NS	NS	NS	NS	NS
		12/6/2012	<0.50	<0.50	<0.50	NS	NS	<0.50	<0.50	<0.50	<0.50
MW 4D		10/27/2014	NS	NS	NS	NS	NS	NS	NS	NS	NS
		2/14/2013	NS	NS	NS	NS	NS	NS	NS	NS	NS
		12/6/2012	<0.50	<0.50	<0.50	NS	NS	<0.50	<0.50	<0.50	<0.50
MW 4S	Annual	11/29/2016	<1.0	<2.0	<1.0	3.4	<2.0	<0.60	<2.0	<2.0	<2.0
		11/24/2015	<1.0	<2.0	<1.0	2.0	<2.0	<0.6	<2.0	0.44J	<2.0
		12/16/2014	<1.0	<2.0	<1.0	1.9J	<2.0	<0.6	<2.0	0.31J	<2.0
		10/27/2014	NS	NS	NS	NS	NS	NS	NS	NS	NS
		12/18/2013	<0.50	<0.50	<0.50	NS	NS	<0.50	<0.50	<0.50	<0.50
		2/14/2013	NS	NS	NS	NS	NS	NS	NS	NS	NS
		12/6/2012	<0.50	<0.50	<0.50	NS	NS	<0.50	<0.50	<0.50	<0.50
		7/10/2012	<0.50	<0.50	<0.50	NS	NS	<0.50	<0.50	<0.50	<0.50
MW 5D		10/27/2014	NS	NS	NS	NS	NS	NS	NS	NS	NS
		2/14/2013	NS	NS	NS	NS	NS	NS	NS	NS	NS
		12/5/2012	<0.50	<0.50	<0.50	NS	NS	<0.50	<0.50	<0.50	<0.50
MW 5S	Annual	11/29/2016	<1.0	<2.0	<1.0	2.3	<2.0	<0.60	<2.0	<2.0	<2.0
		11/24/2015	<1.0	<2.0	<1.0	2.6	<2.0	<0.6	<2.0	0.46J	<2.0
		12/16/2014	<1.0	<2.0	<1.0	2.4	<2.0	<0.6	<2.0	0.32J	<2.0
		10/27/2014	NS	NS	NS	NS	NS	NS	NS	NS	NS
		12/18/2013	<0.50	<0.50	<0.50	NS	NS	<0.50	<0.50	<0.50	<0.50
		2/14/2013	NS	NS	NS	NS	NS	NS	NS	NS	NS
		12/5/2012	<0.50	<0.50	<0.50	NS	NS	<0.50	<0.50	<0.50	<0.50
		7/10/2012	<0.50	<0.50	<0.50	NS	NS	<0.50	<0.50	<0.50	<0.50
MW 7		10/27/2014	NS	NS	NS	NS	NS	NS	NS	NS	
MW 8	Annual	11/29/2016	<1.0	<2.0	<1.0	<2.0	<2.0	<0.60	<2.0	<2.0	<2.0
		11/24/2015	<1.0	<2.0	<1.0	0.42J	<2.0	<0.6	<2.0	<2.0	<2.0
		12/16/2014	<1.0	<2.0	<1.0	0.39J	<2.0	<0.6	<2.0	<2.0	<2.0
		12/18/2013	<0.50	<0.50	<0.50	NS	NS	<0.50	<0.50	<0.50	<0.50
		3/14/2013	NS	NS	NS	NS	NS	NS	NS	NS	NS

Notes: GW-1 and GW-3 MCP Method 1 Standards
MMCL-Massachusetts Max. Contaminant Level
ORSG-Office of Research and Standards Guideline
NS - Not Sampled
J - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B - Analyte detected in Blank and Sample
* Residential samples will be tested for all VOCs during 2nd quarter of the year.



Property	LMP Sample Frequency	Date	Dichlorobromomethane	Dichlorodifluoromethane	Ethylbenzene	Ethyl Ether	ETBE	Hexachlorobutadiene	Isopropylbenzene	Methyl tert-butyl ether	Methylene Chloride
MW 8	Annual	12/7/2012	<0.50	<0.50	<0.50	NS	NS	<0.50	<0.50	<0.50	<0.50
MW 10		10/27/2014	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW 21D		10/27/2014	NS	NS	NS	NS	NS	NS	NS	NS	NS
		2/25/2013	<0.50	<1.0	<1.0	NS	NS	< 0.40	<1.0	0.20J	<1.0
MW 21S	Semi-Annual	11/10/2015	<1.0	<2.0	<1.0	<2.0	<2.0	<0.60	<2.0	0.61J	<2.0
		5/13/2015	<1.0	<2.0	<1.0	4.7	<2.0	<0.60	<2.0	0.68J	<2.0
		10/27/2014	NS	NS	NS	NS	NS	NS	NS	NS	NS
		5/16/2013	<0.50	<1.0	<1.0	NS	NS	< 0.40	<1.0	0.16J	<1.0
		12/7/2012	<0.50	<0.50	<0.50	NS	NS	<0.50	<0.50	<0.50	<0.50
DPW WELL	Annual	11/29/2016	<1.0	<2.0	<1.0	<2.0	<2.0	<0.60	<2.0	<2.0	<2.0
		11/24/2015	<1.0	<2.0	<1.0	<2.0	<2.0	<0.6	<2.0	<2.0	<2.0
		12/16/2014	<1.0	<2.0	<1.0	<2.0	<2.0	< 0.6	<2.0	<2.0	<2.0
265 ALSTON AVENUE	Annual	5/12/2016	<1.0	<2.0	<1.0	<2.0	<2.0	<0.6	<2.0	0.57J	<2.0
		5/12/2016	Duplicate	<1.0	<2.0	<1.0	<2.0	<0.6	<2.0	0.50J	<2.0
		4/1/2015	<1.0	<2.0	<1.0	<2.0	<2.0	<0.60	<2.0	0.54J	<2.0
		3/28/2014	NS	NS	NS	NS	NS	NS	NS	NS	NS
		12/18/2013	<0.50	<0.50	<0.50	NS	NS	<0.50	<0.50	0.26J	<0.50
		3/14/2013	NS	NS	NS	NS	NS	NS	NS	NS	NS
		12/6/2012	<0.50	<0.50	<0.50	NS	NS	<0.50	<0.50	<0.50	<0.50
		6/21/2012	<0.50	<0.50	<0.50	NS	NS	<0.50	<0.50	<0.50	<0.50
280 ALSTON AVENUE	Annual	5/12/2016	<1.0	<2.0	<1.0	<2.0	<2.0	<0.6	<2.0	<2.0	<2.0
		5/13/2015	<1.0	<2.0	<1.0	<2.0	<2.0	<0.60	<2.0	<2.0	<2.0
		12/17/2014	NS	NS	NS	NS	NS	NS	NS	NS	NS
		12/18/2013	<0.50	<0.50	<0.50	NS	NS	<0.50	<0.50	<0.50	<0.50
		2/22/2013	NS	NS	NS	NS	NS	NS	NS	NS	NS
		12/6/2012	<0.50	<0.50	<0.50	NS	NS	<0.50	<0.50	<0.50	<0.50
		6/21/2012	<0.50	<0.50	<0.50	NS	NS	<0.50	<0.50	<0.50	<0.50
125 MEETINGHOUSE	Annual	7/21/2016	<1.0	<2.0	<1.0	<2.0	<2.0	<0.60	<2.0	<2.0	<2.0
		7/21/2016	Duplicate	<1.0	<2.0	<1.0	<2.0	<0.60	<2.0	<2.0	<2.0
		5/8/2013	<0.50	<0.50	<0.50	NS	NS	<0.50	<0.50	<0.50	<0.50
		6/21/2012	<0.50	<0.50	<0.50	NS	NS	<0.50	<0.50	<0.50	<0.50
170 MEETINGHOUSE	Annual	5/12/2016	<1.0	<2.0	<1.0	<2.0	<2.0	<0.6	<2.0	0.20J	<2.0
		5/12/2016	Duplicate	<1.0	<2.0	<1.0	<2.0	<0.6	<2.0	0.20J	<2.0
		5/13/2015	<1.0	<2.0	<1.0	<2.0	<2.0	<0.60	<2.0	0.21J	<2.0
		8/15/2014	NS	NS	NS	NS	NS	NS	NS	NS	NS
		2/15/2013	NS	NS	NS	NS	NS	NS	NS	NS	NS
		12/8/2012	<0.50	<0.50	<0.50	NS	NS	<0.50	<0.50	<0.50	<0.50

Notes: GW-1 and GW-3 MCP Method 1 Standards
MMCL-Massachusetts Max. Contaminant Level
ORSG-Office of Research and Standards Guideline
NS - Not Sampled
J - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B - Analyte detected in Blank and Sample
* Residential samples will be tested for all VOCs during 2nd quarter of the year.



Property	LMP Sample Frequency	Date		Dichlorobromomethane	Dichlorodifluoromethane	Ethylbenzene	Ethyl Ether	ETBE	Hexachlorobutadiene	Isopropylbenzene	Methyl tert-butyl ether	Methylene Chloride
75 OLD ORCHARD	Annual	5/12/2016		<1.0	<2.0	<1.0	<2.0	<2.0	<0.6	<2.0	<2.0	<2.0
		5/12/2016	Duplicate	<1.0	<2.0	<1.0	<2.0	<2.0	<0.6	<2.0	<2.0	<2.0
		8/15/2014		NS	NS	NS	NS	NS	NS	NS	NS	NS
		2/21/2013		NS	NS	NS	NS	NS	NS	NS	NS	NS
		12/6/2012		<0.50	<0.50	<0.50	NS	NS	<0.50	<0.50	<0.50	<0.50
		6/21/2012		<0.50	<0.50	<0.50	NS	NS	<0.50	<0.50	<0.50	<0.50
130 OLD ORCHARD	Annual	12/6/2012		<0.50	<0.50	<0.50	NS	NS	<0.50	<0.50	<0.50	<0.50
		6/21/2012		<0.50	<0.50	<0.50	NS	NS	<0.50	<0.50	<0.50	<0.50
130A OLD ORCHARD	Annual	5/29/2015		<1.0	<2.0	<1.0	<2.0	<2.0	<0.6	<2.0	<2.0	<2.0
		12/17/2014		NS	NS	NS	NS	NS	NS	NS	NS	NS
		12/18/2013		<0.50	<0.50	<0.50	NS	NS	<0.50	<0.50	<0.50	<0.50
		2/25/2013		<0.50	<0.50	<0.50	NS	NS	<0.50	<0.50	<0.50	<0.50
130B OLD ORCHARD	Annual	5/13/2016		<1.0	<2.0	<1.0	<2.0	<2.0	<0.6	<2.0	<2.0	<2.0
		5/29/2015		<1.0	<2.0	<1.0	<2.0	<2.0	<0.6	<2.0	<2.0	<2.0
		12/17/2014		NS	NS	NS	NS	NS	NS	NS	NS	NS
		12/18/2013		<0.50	<0.50	<0.50	NS	NS	<0.50	<0.50	<0.50	<0.50
		2/25/2013		NS	NS	NS	NS	NS	NS	NS	NS	NS
210 OLD ORCHARD	Annual	5/13/2016		<1.0	<2.0	<1.0	<2.0	<2.0	<0.6	<2.0	<2.0	<2.0
		12/18/2013		<0.50	<0.50	<0.50	NS	NS	<0.50	<0.50	1.1	<0.50
		2/15/2013		NS	NS	NS	NS	NS	NS	NS	NS	NS
		12/6/2012		<0.50	<0.50	<0.50	NS	NS	<0.50	<0.50	<0.50	<0.50
		6/21/2012		<0.50	<0.50	<0.50	NS	NS	<0.50	<0.50	<0.50	<0.50
290 OLD ORCHARD	Annual	5/12/2016		<1.0	<2.0	<1.0	<2.0	<2.0	<0.6	<2.0	<2.0	<2.0
		3/2/2015	Inf.	<1.0	<2.0	<1.0	<2.0	<2.0	<0.60	<2.0	<2.0	<2.0
		3/2/2015	Eff.	<1.0	<2.0	<1.0	<2.0	<2.0	<0.60	<2.0	<2.0	<2.0
		7/23/2014		NS	NS	NS	NS	NS	NS	NS	NS	NS
		5/16/2013		NS	NS	NS	NS	NS	NS	NS	NS	NS
		5/9/2013		<0.50	<0.50	<0.50	NS	NS	<0.50	<0.50	<0.50	<0.50
		2/15/2013		<0.50	<0.50	<0.50	NS	NS	<0.50	<0.50	<0.50	<0.50
		6/21/2012		<0.50	<0.50	<0.50	NS	NS	<0.50	<0.50	<0.50	<0.50

Notes: GW-1 and GW-3 MCP Method 1 Standards
MMCL-Massachusetts Max. Contaminant Level
ORSG-Office of Research and Standards Guideline
NS - Not Sampled
J - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B - Analyte detected in Blank and Sample
* Residential samples will be tested for all VOCs during 2nd quarter of the year.

3/23/2017 Page 5 of 5
Report: GW VOC 6
Datebase: Eastham Landfill Monitoring



TABLE 4.1
SECTION 7
SUMMARY OF LANDFILL MONITORING PLAN
GROUNDWATER ANALYTICAL RESULTS
Volatile Organic Compounds
Eastham Landfill Monitoring Wells and Private Drinking Wells
Eastham, MA
(All results in ug/l)

Property	LMP Sample Frequency	Date	Isopropyl Ether	Naphthalene	n-Butylbenzene	N-Propylbenzene	sec-Butylbenzene	Styrene	tert-Butylbenzene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene
Standards													
GW1			NA	140	NA	NA	NA	100	NA	5	1000	100	NA
GW3			NA	20000	NA	NA	NA	6000	NA	30000	40000	50000	NA
MMCL			NA	NA	NA	NA	NA	100	NA	5	1000	100	NA
ORSG			NA	140	NA	NA	NA	NA	NA	NA	NA	NA	NA
Results													
ESMW-1D		9/21/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
ESMW-1I		9/21/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
ESMW-1S		9/21/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
ESMW-2D		9/21/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
ESMW-2I		9/21/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
ESMW-2S		9/21/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
ESMW-3D		9/21/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
ESMW-3I		9/21/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
ESMW-3S		9/21/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
ESMW-4D		9/21/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
ESMW-4I		9/21/2016	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW 2D		2/14/2013	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		12/6/2012	NS	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
MW 2S	Annual	11/29/2016	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0	<2.0	<1.0	<1.0	<1.0	<0.50
		11/24/2015	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0	<2.0	<1.0	<1.0	<1.0	<0.5
		12/16/2014	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0	<2.0	<1.0	<1.0	<1.0	<0.5
		12/18/2013	NS	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50

Notes: GW-1 and GW-3 MCP Method 1 Standards
MMCL-Massachusetts Max. Contaminant Level
ORSG-Office of Research and Standards Guideline
NS - Not Sampled
J - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B - Analyte detected in Blank and Sample
* Residential samples will be tested for all VOCs during 2nd quarter of the year.



Property	LMP Sample Frequency	Date	Isopropyl Ether	Naphthalene	n-Butylbenzene	N-Propylbenzene	sec-Butylbenzene	Styrene	tert-Butylbenzene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	
MW 2S	Annual	2/14/2013	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
		12/6/2012	NS	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
		7/10/2012	NS	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
MW 3D	Quarterly	3/1/2017	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0	<2.0	<1.0	1.0	<1.0	<0.50	
		11/29/2016	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0	<2.0	<1.0	<1.0	<1.0	<0.50
		8/10/2016	<2.0	0.43J	<2.0	<2.0	<2.0	<2.0	<1.0	<2.0	<1.0	<1.0	<1.0	<0.50
		5/18/2016	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0	<2.0	<1.0	<1.0	<1.0	<0.5
		2/23/2016	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0	<2.0	<1.0	<1.0	<1.0	<0.5
		11/24/2015	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0	<2.0	<1.0	<1.0	<1.0	<0.5
		8/26/2015	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0	<2.0	<1.0	<1.0	<1.0	<0.5
		5/13/2015	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0	<2.0	<1.0	<1.0	<1.0	<0.5
		11/10/2014	NS	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
		11/10/2014	Duplicate	NS	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
		10/27/2014	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		9/3/2014	NS	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
		5/19/2014	NS	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.50
		2/27/2014	NS	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.50
		11/25/2013	NS	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
		9/5/2013	NS	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
		5/8/2013	NS	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
		2/14/2013	NS	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
		12/6/2012	NS	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
10/9/2012	NS	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		
7/10/2012	NS	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		
3/20/2012	NS	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		
MW 3I	Quarterly	3/1/2017	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0	<2.0	<1.0	<1.0	<1.0	<0.50	
		11/29/2016	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0	<2.0	<1.0	<1.0	<1.0	<0.50
		8/10/2016	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0	<2.0	<1.0	<1.0	<1.0	<0.50
		5/18/2016	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0	<2.0	<1.0	<1.0	<1.0	<0.5
		2/23/2016	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0	<2.0	<1.0	<1.0	<1.0	<0.5
		11/24/2015	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0	<2.0	<1.0	<1.0	<1.0	<0.5
		8/26/2015	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0	<2.0	<1.0	<1.0	<1.0	<0.5
		5/13/2015	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0	<2.0	<1.0	<1.0	<1.0	<0.5
		12/16/2014	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		11/10/2014	NS	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
9/3/2014	NS	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0		

Notes: GW-1 and GW-3 MCP Method 1 Standards
MMCL-Massachusetts Max. Contaminant Level
ORSG-Office of Research and Standards Guideline
NS - Not Sampled
J - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B - Analyte detected in Blank and Sample
* Residential samples will be tested for all VOCs during 2nd quarter of the year.



Property	LMP Sample Frequency	Date	Isopropyl Ether	Naphthalene	n-Butylbenzene	N-Propylbenzene	sec-Butylbenzene	Styrene	tert-Butylbenzene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	
MW 3I	Quarterly	5/19/2014	NS	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.50	
		2/27/2014	NS	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.50	
		11/25/2013	NS	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
		9/5/2013	NS	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
		5/8/2013	NS	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
		2/14/2013	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
		2/14/2013	NS	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
		12/6/2012	NS	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
		10/9/2012	NS	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
		7/10/2012	NS	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
3/20/2012	NS	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		
MW 3S		2/14/2013	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
		12/6/2012	NS	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
MW 4D		10/27/2014	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
		2/14/2013	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
		12/6/2012	NS	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
MW 4S	Annual	11/29/2016	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0	<2.0	<1.0	<1.0	<1.0	<0.50	
		11/24/2015	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0	<2.0	<1.0	<1.0	<1.0	<0.5	
		12/16/2014	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0	<2.0	<1.0	<1.0	<1.0	<0.5	
		10/27/2014	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
		12/18/2013	NS	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
		2/14/2013	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
		12/6/2012	NS	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
		7/10/2012	NS	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
MW 5D		10/27/2014	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
		2/14/2013	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
		12/5/2012	NS	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
MW 5S	Annual	11/29/2016	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0	<2.0	<1.0	<1.0	<1.0	<0.50	
		11/24/2015	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0	<2.0	<1.0	<1.0	<1.0	<0.5	
		12/16/2014	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0	<2.0	<1.0	<1.0	<1.0	<0.5	
		10/27/2014	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
		12/18/2013	NS	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
		2/14/2013	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
		12/5/2012	NS	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
		7/10/2012	NS	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	

Notes: GW-1 and GW-3 MCP Method 1 Standards
MMCL-Massachusetts Max. Contaminant Level
ORSG-Office of Research and Standards Guideline
NS - Not Sampled
J - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B - Analyte detected in Blank and Sample
* Residential samples will be tested for all VOCs during 2nd quarter of the year.

Property	LMP Sample Frequency	Date	Isopropyl Ether	Naphthalene	n-Butylbenzene	N-Propylbenzene	sec-Butylbenzene	Styrene	tert-Butylbenzene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	
MW 7		10/27/2014	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
MW 8	Annual	11/29/2016	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0	<2.0	<1.0	<1.0	<1.0	<0.50	
		11/24/2015	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0	<2.0	<1.0	<1.0	<1.0	<0.5	
		12/16/2014	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0	<2.0	<1.0	<1.0	<1.0	<0.5	
		12/18/2013	NS	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
		3/14/2013	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
		12/7/2012	NS	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
MW 10		10/27/2014	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS		
MW 21D		10/27/2014	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
		2/25/2013	NS	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	< 0.40	
MW 21S	Semi-Annual	11/10/2015	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0	<2.0	<1.0	0.31J	<1.0	<0.50	
		5/13/2015	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0	<2.0	<1.0	<1.0	<1.0	<0.50	
		10/27/2014	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
		5/16/2013	NS	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	< 0.40	
		12/7/2012	NS	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
DPW WELL	Annual	11/29/2016	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0	<2.0	<1.0	<1.0	<1.0	<0.50	
		11/24/2015	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0	<2.0	<1.0	<1.0	<1.0	<0.5	
		12/16/2014	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0	<2.0	<1.0	<1.0	<1.0	<0.5	
265 ALSTON AVENUE	Annual	5/12/2016	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0	<2.0	<1.0	<1.0	<1.0	<0.5	
		5/12/2016	Duplicate	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0	<2.0	<1.0	<1.0	<1.0	<0.5
		4/1/2015	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0	<2.0	<1.0	<1.0	<1.0	<0.50	
		3/28/2014	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
		12/18/2013	NS	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
		3/14/2013	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
		12/6/2012	NS	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
		6/21/2012	NS	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
280 ALSTON AVENUE	Annual	5/12/2016	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0	<2.0	<1.0	<1.0	<1.0	<0.5	
		5/13/2015	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0	<2.0	<1.0	<1.0	<1.0	<0.50	
		12/17/2014	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
		12/18/2013	NS	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
		2/22/2013	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
		12/6/2012	NS	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
		6/21/2012	NS	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
125 MEETINGHOUSE ROAD	Annual	7/21/2016	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0	<2.0	<1.0	<1.0	<1.0	<0.50	

Notes: GW-1 and GW-3 MCP Method 1 Standards
MMCL-Massachusetts Max. Contaminant Level
ORSG-Office of Research and Standards Guideline
NS - Not Sampled
J - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B - Analyte detected in Blank and Sample
* Residential samples will be tested for all VOCs during 2nd quarter of the year.



Property	LMP Sample Frequency	Date	Isopropyl Ether	Naphthalene	n-Butylbenzene	N-Propylbenzene	sec-Butylbenzene	Styrene	tert-Butylbenzene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene
125 MEETINGHOUSE ROAD	Annual	7/21/2016	Duplicate	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0	<2.0	<1.0	<1.0	<0.50
		5/8/2013		NS	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
		6/21/2012		NS	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
170 MEETINGHOUSE ROAD	Annual	5/12/2016		<2.0	<2.0	<2.0	<2.0	<1.0	<2.0	<1.0	<1.0	<1.0	<0.5
		5/12/2016	Duplicate	<2.0	<2.0	<2.0	<2.0	<1.0	<2.0	<1.0	<1.0	<1.0	<0.5
		5/13/2015		<2.0	<2.0	<2.0	<2.0	<1.0	<2.0	<1.0	<1.0	<1.0	<0.50
		8/15/2014		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		2/15/2013		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		12/8/2012		NS	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
75 OLD ORCHARD ROAD	Annual	5/12/2016		<2.0	<2.0	<2.0	<2.0	<1.0	<2.0	<1.0	<1.0	<1.0	<0.5
		5/12/2016	Duplicate	<2.0	<2.0	<2.0	<2.0	<1.0	<2.0	<1.0	<1.0	<1.0	<0.5
		8/15/2014		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		2/21/2013		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		12/6/2012		NS	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
130 OLD ORCHARD ROAD	Annual	6/21/2012		NS	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
		6/21/2012		NS	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
130A OLD ORCHARD ROAD	Annual	5/29/2015		<2.0	<2.0	<2.0	<2.0	<1.0	<2.0	<1.0	<1.0	<1.0	<0.5
		12/17/2014		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		12/18/2013		NS	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
		2/25/2013		NS	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
130B OLD ORCHARD ROAD	Annual	5/13/2016		<2.0	<2.0	<2.0	<2.0	<1.0	<2.0	<1.0	<1.0	<1.0	<0.5
		5/29/2015		<2.0	<2.0	<2.0	<2.0	<1.0	<2.0	<1.0	<1.0	<1.0	<0.5
		12/17/2014		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		12/18/2013		NS	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
		2/25/2013		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
210 OLD ORCHARD ROAD	Annual	5/13/2016		<2.0	<2.0	<2.0	<2.0	<1.0	<2.0	<1.0	<1.0	<1.0	<0.5
		12/18/2013		NS	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
		2/15/2013		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		12/6/2012		NS	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
		6/21/2012		NS	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
290 OLD ORCHARD ROAD	Annual	5/12/2016		<2.0	<2.0	<2.0	<2.0	<1.0	<2.0	<1.0	<1.0	<1.0	<0.5
		3/2/2015	Inf.	<2.0	<2.0	<2.0	<2.0	<1.0	<2.0	<1.0	<1.0	<1.0	<0.50
		3/2/2015	Eff.	<2.0	<2.0	<2.0	<2.0	<1.0	<2.0	<1.0	<1.0	<1.0	<0.50

Notes: GW-1 and GW-3 MCP Method 1 Standards
MMCL-Massachusetts Max. Contaminant Level
ORSG-Office of Research and Standards Guideline
NS - Not Sampled
J - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B - Analyte detected in Blank and Sample
* Residential samples will be tested for all VOCs during 2nd quarter of the year.



Property	LMP Sample Frequency	Date	Isopropyl Ether	Naphthalene	n-Butylbenzene	N-Propylbenzene	sec-Butylbenzene	Styrene	tert-Butylbenzene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	
290 OLD ORCHARD ROAD	Annual	7/23/2014	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
		5/16/2013	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
		5/9/2013	NS	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
		2/15/2013	NS	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
		6/21/2012	NS	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50

Notes: GW-1 and GW-3 MCP Method 1 Standards
MMCL-Massachusetts Max. Contaminant Level
ORSG-Office of Research and Standards Guideline
NS - Not Sampled
J - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B - Analyte detected in Blank and Sample
* Residential samples will be tested for all VOCs during 2nd quarter of the year.

3/23/2017 Page 6 of 6
Report: GW VOC 7
Datebase: Eastham Landfill Monitoring



TABLE 4.1
SECTION 8
SUMMARY OF LANDFILL MONITORING PLAN
GROUNDWATER ANALYTICAL RESULTS
Volatile Organic Compounds
Eastham Landfill Monitoring Wells and Private Drinking Wells
Eastham, MA
(All results in ug/l)

Property	LMP Sample Frequency	Date	TAME	Tetrahydrofuran	Trichloroethene	Trichlorofluoromethane	Vinyl chloride	Total Xylenes
Standards								
GW1			NA	NA	5	NA	2	10000
GW3			NA	NA	5000	NA	50000	5000
MMCL			NA	NA	5	NA	2	10000
ORSG			NA	NA	NA	NA	NA	NA
Results								
ESMW-1D		9/21/2016	NS	NS	NS	NS	NS	NS
ESMW-1I		9/21/2016	NS	NS	NS	NS	NS	NS
ESMW-1S		9/21/2016	NS	NS	NS	NS	NS	NS
ESMW-2D		9/21/2016	NS	NS	NS	NS	NS	NS
ESMW-2I		9/21/2016	NS	NS	NS	NS	NS	NS
ESMW-2S		9/21/2016	NS	NS	NS	NS	NS	NS
ESMW-3D		9/21/2016	NS	NS	NS	NS	NS	NS
ESMW-3I		9/21/2016	NS	NS	NS	NS	NS	NS
ESMW-3S		9/21/2016	NS	NS	NS	NS	NS	NS
ESMW-4D		9/21/2016	NS	NS	NS	NS	NS	NS
ESMW-4I		9/21/2016	NS	NS	NS	NS	NS	NS
MW 2D		2/14/2013	NS	NS	NS	NS	NS	NS
		12/6/2012	NS	NS	<0.50	<0.50	<0.50	<0.50
MW 2S	Annual	11/29/2016	<2.0	<2.0	<1.0	<2.0	<1.0	<1.0
		11/24/2015	<2.0	<2.0	<1.0	<2.0	<1.0	<1.0
		12/16/2014	<2.0	<2.0	<1.0	<2.0	<1.0	<1.0
		12/18/2013	NS	NS	<0.50	<0.50	<0.50	<0.50
		2/14/2013	NS	NS	NS	NS	NS	NS
		12/6/2012	NS	NS	<0.50	<0.50	<0.50	<0.50

Notes: GW-1 and GW-3 MCP Method 1 Standards
MMCL-Massachusetts Max. Contaminant Level
ORSG-Office of Research and Standards Guideline
NS - Not Sampled
J - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B - Analyte detected in Blank and Sample
* Residential samples will be tested for all VOCs during 2nd quarter of the year.



Property	LMP Sample Frequency	Date	TAME	Tetrahydrofuran	Trichloroethene	Trichlorofluoromethane	Vinyl chloride	Total Xylenes	
MW 2S	Annual	7/10/2012	NS	NS	<0.50	<0.50	<0.50	<0.50	
MW 3D	Quarterly	3/1/2017	<2.0	<2.0	<1.0	<2.0	<1.0	<1.0	
		11/29/2016	<2.0	<2.0	<1.0	<2.0	<1.0	<1.0	
		8/10/2016	<2.0	<2.0	<1.0	<2.0	<1.0	<1.0	
		5/18/2016	<2.0	<2.0	<1.0	<2.0	0.20J	<1.0	
		2/23/2016	<2.0	0.59J	<1.0	<2.0	0.27J	<1.0	
		11/24/2015	<2.0	<2.0	<1.0	<2.0	0.20J	<1.0	
		8/26/2015	<2.0	1.1 J	<1.0	<2.0	0.28 J	<1.0	
		5/13/2015	<2.0	1.2J	<1.0	<2.0	0.37J	<1.0	
		11/10/2014	NS	NS	<5.0	<5.0	<5.0	<5.0	
		11/10/2014	Duplicate	NS	NS	<5.0	<5.0	<5.0	<5.0
		10/27/2014	NS	NS	NS	NS	NS	NS	
		9/3/2014	NS	NS	<5.0	<5.0	<5.0	<5.0	
		5/19/2014	NS	NS	<1.0	<1.0	<1.0	<1.0	
		2/27/2014	NS	NS	<1.0	<1.0	<1.0	<1.0	
		11/25/2013	NS	NS	<0.50	<0.50	<0.50	<0.50	
		9/5/2013	NS	NS	<0.50	<0.50	<0.50	<0.50	
		5/8/2013	NS	NS	<0.50	<0.50	<0.50	<0.50	
		2/14/2013	NS	NS	<0.50	<0.50	<0.50	<0.50	
		12/6/2012	NS	NS	<0.50	<0.50	<0.50	<0.50	
		10/9/2012	NS	NS	<0.50	<0.50	0.58	<0.50	
7/10/2012	NS	NS	<0.50	<0.50	<0.50	<0.50			
3/20/2012	NS	NS	<0.50	<0.50	<0.50	<0.50			
MW 3I	Quarterly	3/1/2017	<2.0	<2.0	<1.0	<2.0	<1.0	<1.0	
		11/29/2016	<2.0	<2.0	<1.0	<2.0	<1.0	<1.0	
		8/10/2016	<2.0	<2.0	<1.0	<2.0	<1.0	<1.0	
		5/18/2016	<2.0	<2.0	<1.0	<2.0	<1.0	<1.0	
		2/23/2016	<2.0	<2.0	<1.0	<2.0	<1.0	<1.0	
		11/24/2015	<2.0	<2.0	<1.0	<2.0	<1.0	<1.0	
		8/26/2015	<2.0	<2.0	<1.0	<2.0	<1.0	<1.0	
		5/13/2015	<2.0	<2.0	<1.0	<2.0	<1.0	<1.0	
		12/16/2014	NS	NS	NS	NS	NS	NS	
		11/10/2014	NS	NS	<5.0	<5.0	<5.0	<5.0	
		9/3/2014	NS	NS	<5.0	<5.0	<5.0	<5.0	
		5/19/2014	NS	NS	<1.0	<1.0	<1.0	<1.0	
		2/27/2014	NS	NS	<1.0	<1.0	<1.0	<1.0	
		11/25/2013	NS	NS	<0.50	<0.50	<0.50	<0.50	
		9/5/2013	NS	NS	<0.50	<0.50	<0.50	<0.50	

Notes: GW-1 and GW-3 MCP Method 1 Standards
MMCL-Massachusetts Max. Contaminant Level
ORSG-Office of Research and Standards Guideline
NS - Not Sampled
J - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B - Analyte detected in Blank and Sample
* Residential samples will be tested for all VOCs during 2nd quarter of the year.



Property	LMP Sample Frequency	Date	TAME	Tetrahydrofuran	Trichloroethene	Trichlorofluoromethane	Vinyl chloride	Total Xylenes
MW 3I	Quarterly	5/8/2013	NS	NS	<0.50	<0.50	<0.50	<0.50
		2/14/2013	NS	NS	NS	NS	NS	NS
		2/14/2013	NS	NS	<0.50	<0.50	<0.50	<0.50
		12/6/2012	NS	NS	<0.50	<0.50	<0.50	<0.50
		10/9/2012	NS	NS	<0.50	<0.50	<0.50	<0.50
		7/10/2012	NS	NS	<0.50	<0.50	<0.50	<0.50
		3/20/2012	NS	NS	<0.50	<0.50	<0.50	<0.50
MW 3S		2/14/2013	NS	NS	NS	NS	NS	NS
		12/6/2012	NS	NS	<0.50	<0.50	<0.50	<0.50
MW 4D		10/27/2014	NS	NS	NS	NS	NS	NS
		2/14/2013	NS	NS	NS	NS	NS	NS
		12/6/2012	NS	NS	<0.50	<0.50	<0.50	<0.50
MW 4S	Annual	11/29/2016	<2.0	<2.0	<1.0	<2.0	<1.0	<1.0
		11/24/2015	<2.0	<2.0	<1.0	<2.0	<1.0	<1.0
		12/16/2014	<2.0	<2.0	<1.0	<2.0	<1.0	<1.0
		10/27/2014	NS	NS	NS	NS	NS	NS
		12/18/2013	NS	NS	<0.50	<0.50	<0.50	<0.50
		2/14/2013	NS	NS	NS	NS	NS	NS
		12/6/2012	NS	NS	<0.50	<0.50	<0.50	<0.50
MW 5D		10/27/2014	NS	NS	NS	NS	NS	NS
		2/14/2013	NS	NS	NS	NS	NS	NS
		12/5/2012	NS	NS	<0.50	<0.50	<0.50	<0.50
MW 5S	Annual	11/29/2016	<2.0	<2.0	<1.0	<2.0	<1.0	<1.0
		11/24/2015	<2.0	<2.0	<1.0	<2.0	<1.0	<1.0
		12/16/2014	<2.0	<2.0	<1.0	<2.0	<1.0	<1.0
		10/27/2014	NS	NS	NS	NS	NS	NS
		12/18/2013	NS	NS	<0.50	<0.50	<0.50	<0.50
		2/14/2013	NS	NS	NS	NS	NS	NS
		12/5/2012	NS	NS	<0.50	<0.50	<0.50	<0.50
MW 7		10/27/2014	NS	NS	NS	NS	NS	NS
MW 8	Annual	11/29/2016	<2.0	<2.0	<1.0	<2.0	<1.0	<1.0
		11/24/2015	<2.0	<2.0	<1.0	<2.0	<1.0	<1.0
		12/16/2014	<2.0	<2.0	<1.0	<2.0	<1.0	<1.0
		12/18/2013	NS	NS	<0.50	<0.50	<0.50	<0.50
		3/14/2013	NS	NS	NS	NS	NS	NS

Notes: GW-1 and GW-3 MCP Method 1 Standards
MMCL-Massachusetts Max. Contaminant Level
ORSG-Office of Research and Standards Guideline
NS - Not Sampled
J - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B - Analyte detected in Blank and Sample
* Residential samples will be tested for all VOCs during 2nd quarter of the year.



Property	LMP Sample Frequency	Date	TAME	Tetrahydrofuran	Trichloroethene	Trichlorofluoromethane	Vinyl chloride	Total Xylenes
MW 8	Annual	12/7/2012	NS	NS	<0.50	<0.50	<0.50	<0.50
MW 10		10/27/2014	NS	NS	NS	NS	NS	NS
MW 21D		10/27/2014	NS	NS	NS	NS	NS	NS
		2/25/2013	NS	NS	<1.0	<1.0	<0.50	<2.0
MW 21S	Semi-Annual	11/10/2015	<2.0	<2.0	<1.0	<2.0	<1.0	<1.0
		5/13/2015	<2.0	0.90J	<1.0	<2.0	<1.0	<1.0
		10/27/2014	NS	NS	NS	NS	NS	NS
		5/16/2013	NS	NS	<1.0	<1.0	<1.0	<2.0
		12/7/2012	NS	NS	<0.50	<0.50	<0.50	<0.50
DPW WELL	Annual	11/29/2016	<2.0	<2.0	<1.0	<2.0	<1.0	<1.0
		11/24/2015	<2.0	<2.0	<1.0	<2.0	<1.0	<1.0
		12/16/2014	<2.0	<2.0	<1.0	<2.0	<1.0	<1.0
265 ALSTON AVENUE	Annual	5/12/2016	<2.0	<2.0	<1.0	<2.0	<1.0	<1.0
		5/12/2016	Duplicate	<2.0	<2.0	<2.0	<1.0	<1.0
		4/1/2015	<2.0	<2.0	<1.0	<2.0	<1.0	<1.0
		3/28/2014	NS	NS	NS	NS	NS	NS
		12/18/2013	NS	NS	<0.50	<0.50	<0.50	<1.0
		3/14/2013	NS	NS	NS	NS	NS	NS
		12/6/2012	NS	NS	<0.50	<0.50	<0.50	<0.50
		6/21/2012	NS	NS	<0.50	<0.50	<0.50	<0.50
280 ALSTON AVENUE	Annual	5/12/2016	<2.0	<2.0	<1.0	<2.0	<1.0	<1.0
		5/13/2015	<2.0	<2.0	<1.0	<2.0	<1.0	<1.0
		12/17/2014	NS	NS	NS	NS	NS	NS
		12/18/2013	NS	NS	<0.50	<0.50	<0.50	<1.0
		2/22/2013	NS	NS	NS	NS	NS	NS
		12/6/2012	NS	NS	<0.50	<0.50	<0.50	<0.50
		6/21/2012	NS	NS	<0.50	<0.50	<0.50	<0.50
125 MEETINGHOUSE ROAD	Annual	7/21/2016	<2.0	5.8	<1.0	<2.0	<1.0	<1.0
		7/21/2016	Duplicate	<2.0	8.2	<1.0	<2.0	<1.0
		5/8/2013	NS	NS	<0.50	<0.50	<0.50	<1.0
		6/21/2012	NS	NS	<0.50	<0.50	<0.50	<0.50
170 MEETINGHOUSE ROAD	Annual	5/12/2016	<2.0	<2.0	<1.0	<2.0	<1.0	<1.0
		5/12/2016	Duplicate	<2.0	<2.0	<2.0	<1.0	<1.0
		5/13/2015	<2.0	<2.0	<1.0	<2.0	<1.0	<1.0
		8/15/2014	NS	NS	NS	NS	NS	NS
		2/15/2013	NS	NS	NS	NS	NS	NS
		12/8/2012	NS	NS	<0.50	<0.50	<0.50	<0.50

Notes: GW-1 and GW-3 MCP Method 1 Standards
MMCL-Massachusetts Max. Contaminant Level
ORSG-Office of Research and Standards Guideline
NS - Not Sampled
J - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B - Analyte detected in Blank and Sample
* Residential samples will be tested for all VOCs during 2nd quarter of the year.



Property	LMP Sample Frequency	Date		TAME	Tetrahydrofuran	Trichloroethene	Trichlorofluoromethane	Vinyl chloride	Total Xylenes
75 OLD ORCHARD ROAD	Annual	5/12/2016		<2.0	<2.0	<1.0	<2.0	<1.0	<1.0
		5/12/2016	Duplicate	<2.0	<2.0	<1.0	<2.0	<1.0	<1.0
		8/15/2014		NS	NS	NS	NS	NS	NS
		2/21/2013		NS	NS	NS	NS	NS	NS
		12/6/2012		NS	NS	<0.50	<0.50	<0.50	<0.50
		6/21/2012		NS	NS	<0.50	<0.50	<0.50	<0.50
130 OLD ORCHARD ROAD	Annual	12/6/2012		NS	NS	<0.50	<0.50	<0.50	<0.50
		6/21/2012		NS	NS	<0.50	<0.50	<0.50	<0.50
130A OLD ORCHARD ROAD	Annual	5/29/2015		<2.0	<2.0	<1.0	<2.0	<1.0	<1.0
		12/17/2014		NS	NS	NS	NS	NS	NS
		12/18/2013		NS	NS	<0.50	<0.50	<0.50	<1.0
		2/25/2013		NS	NS	<0.50	<0.50	<0.50	<1.0
130B OLD ORCHARD ROAD	Annual	5/13/2016		<2.0	<2.0	<1.0	<2.0	<1.0	<1.0
		5/29/2015		<2.0	<2.0	<1.0	<2.0	<1.0	<1.0
		12/17/2014		NS	NS	NS	NS	NS	NS
		12/18/2013		NS	NS	<0.50	<0.50	<0.50	<1.0
		2/25/2013		NS	NS	NS	NS	NS	NS
210 OLD ORCHARD ROAD	Annual	5/13/2016		<2.0	<2.0	<1.0	<2.0	<1.0	<1.0
		12/18/2013		NS	NS	<0.50	<0.50	<0.50	<1.0
		2/15/2013		NS	NS	NS	NS	NS	NS
		12/6/2012		NS	NS	<0.50	<0.50	<0.50	<0.50
		6/21/2012		NS	NS	<0.50	<0.50	<0.50	<0.50
290 OLD ORCHARD ROAD	Annual	5/12/2016		<2.0	<2.0	<1.0	<2.0	<1.0	<1.0
		3/2/2015	Inf.	<2.0	<2.0	<1.0	<2.0	<1.0	<1.0
		3/2/2015	Eff.	<2.0	<2.0	<1.0	<2.0	<1.0	<1.0
		7/23/2014		NS	NS	NS	NS	NS	NS
		5/16/2013		NS	NS	NS	NS	NS	NS
		5/9/2013		NS	NS	<0.50	<0.50	<0.50	<1.0
		2/15/2013		NS	NS	<0.50	<0.50	<0.50	<1.0
		6/21/2012		NS	NS	<0.50	<0.50	<0.50	<0.50

Notes: GW-1 and GW-3 MCP Method 1 Standards

MMCL-Massachusetts Max. Contaminant Level

ORSG-Office of Research and Standards Guideline

NS - Not Sampled

J - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

B - Analyte detected in Blank and Sample

* Residential samples will be tested for all VOCs during 2nd quarter of the year.

3/23/2017

Page 5 of 5

Report:

GW VOC 8

Datebase:

Eastham Landfill Monitoring



**TABLE 4.2
SUMMARY OF LANDFILL MONITORING PLAN
GROUNDWATER ANALYTICAL RESULTS**

Metals

**Eastham Landfill
Eastham, MA
(All results in ug/l)**

Property	Sample Frequency	Date	Arsenic	Barium	Cadmium	Chromium	Copper	Iron	Lead	Manganese	Mercury	Selenium	Silver	Zinc
Standards														
GW-1			10	2000	5	100	NA	NA	15	NA	2.0	50	100	5000
GW-3			900	50000	4	300	NA	NA	10	NA	20	100	7	900
MMCL			10	2000	5	100	NA	NA	15	NA	2.0	50	NA	NA
SMCL			NA	NA	NA	NA	1000	300	NA	50	NA	NA	100	5000
Results														
ESMW-1D	SemiAnnually	9/21/2016	<5.0	6.0J	<4.0	<10	<10	1100	2.0J	308	<0.2	3.0J	<7	<50
ESMW-1I	SemiAnnually	9/21/2016	<5.0	56	<4.0	3.2J	2.0J	960	<10	60	<0.2	<10	<7	8.0J
ESMW-1S	SemiAnnually	9/21/2016	2.0J	182	<4.0	<10	2.0J	20J	<10	576	<0.2	<10	<7	12J
ESMW-2D	SemiAnnually	9/21/2016	<5.0	3.0J	<4.0	<10	<10	310	<10	98	<0.2	<10	<7	<50
ESMW-2I	SemiAnnually	9/21/2016	16	204	1.0J	200	151	51000	65	424	<0.2	<10	<7	289
ESMW-2S	SemiAnnually	9/21/2016	<5.0	34	<4.0	20	6.0J	4400	5.0J	56	<0.2	<10	<7	12J
ESMW-3D	SemiAnnually	9/21/2016	58	331	1.0J	400	169	140000	140	1470	<0.2	<10	<7	527
ESMW-3I	SemiAnnually	9/21/2016	15	71	<4.0	80	28	32000	21	1790	<0.2	<10	<7	95
ESMW-3S	SemiAnnually	9/21/2016	21	126	<4.0	180	49	56000	39	785	<0.2	<10	<7	175
ESMW-4D	SemiAnnually	9/21/2016	<5.0	15	<4.0	3.7J	4.0J	2300	3.0J	87	<0.2	<10	<7	9.0J
ESMW-4I	SemiAnnually	9/21/2016	<5.0	11	<4.0	<10	2.0J	90	<10	201	<0.2	<10	<7	<50
MW 2D		12/6/2012	<3	3.2	<3	<3	<3	<100	<3	51	<0.5	<15	<2.0	<60
MW 2S	Annual	11/29/2016	<5	11	<4	<10	<10	420	<10	381	<0.2	<10	<7	<50
		11/24/2015	<5	12	<4	5.5J	<10	440	<10	441	<0.2	<10	<7	<50
		12/16/2014	4.7 J	9.0 J	<4	<10	<10	430	<10	311	<0.2	<10	<7	<50
		12/18/2013	<3	10	<3	<3	<3	500	<3	410	<0.3	<15	<3.0	<60
		12/6/2012	<3	13	<3	<3	<3	680	<3	430	<0.5	<15	<2.0	<60
		7/10/2012	<3	13	<3	<3	<3	580	<3	390	<0.5	<15	<2.0	<100

Notes: GW-1 and GW-3 MCP Method 1 Standards
MMCL-Massachusetts Max. Contaminant Level
SMCL-Secondary Max. Contaminant Level
NS - Not Sampled
J - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B - Analyte detected in Blank and Sample
* DPW Well sample was not filtered and results are therefore total metals rather than dissolved.
** Residential samples will be tested for metals during 2nd quarter of the year.



Property	Sample Frequency	Date	Arsenic	Barium	Cadmium	Chromium	Copper	Iron	Lead	Manganese	Mercury	Selenium	Silver	Zinc		
MW 3D	Quarterly	3/1/2017	79	71	<4	<10	<10	35000	<10		<0.2	<10	<7	<50		
		11/29/2016	45	44	<4	<10	<10	22000	<10	1230	<0.2	<10	<7	<50		
		8/10/2016	72	66	<4	<10	<10	30000	2J	1230	<0.2	<10	<7	<50		
		5/18/2016	89	72	<4	<10	<10	32000	<100	1170	<0.2	<10	<7	<50		
		2/23/2016	69	60	<4	<10	<10	27000	<10	970	<0.2	<10	<7	<50		
		11/24/2015	67	68	<4	4.8J	<10	30000	<10	1180	<0.2	<10	<7	<50		
		8/26/2015	66	71	<4	<10	<10	30000	<10	1220	<1.0	<10	<7	60		
		5/13/2015	70	74	<4	<10	<10	30000	<10	1220	<0.2	6.0 J	<7	<50		
		11/10/2014	70	81	<3	5	<3	33000	<3	1400	<0.3	<15	<2	<60		
		11/10/2014	Duplicate	71	82	<3	5.2	<3	32000	<3	1400	<0.3	<15	<2	<60	
		9/3/2014	73	86	<3	6.0	<3	35000	<3	1400	<0.3	<15	<2	<60		
		5/19/2014	66	82	<3	<3	<3	31000	<3	1300	82	<15	<2	<60		
		2/27/2014	54	77	<1	<2	<3	42000	<6	1800	<0.5	<6.0	<2	12		
		11/25/2013	68	88	<3	3.3	<3	30000	<3	1400	NS	<15	<3.0	<60		
		9/5/2013	64	89	<3	4.7	<3	36000	<3	1300	<0.3	<15	<3.0	<60		
		5/8/2013	74	96	<3	6.3	<3	40000	<3	1300	<0.5	<15	<3.0	<60		
		2/14/2013	68	96	<3	5.9	<3	40000	<3	1700	<0.5	<15	<2.0	<60		
		12/6/2012	62	97	<3	<3	<3	40000	<3	1800	<0.5	<15	<2.0	<60		
		10/9/2012	65	90	<3	3.0	<3	39000	<3	1400	<0.5	<15	<2.0	<100		
		7/10/2012	66	99	<3	<3	<3	38000	<3	1400	<0.5	<15	<2.0	<100		
		3/20/2012	69	100	<3	<3	<3	40000	<3	1700	<0.5	<15	<2.0	<60		
		MW 3I	Quarterly	3/1/2017	48	11	<4	<10	<10	64000	<10		<0.2	<10	<7	<50
				11/29/2016	26	<10	<4	<10	<10	53000	<10	1210	<0.2	<10	<7	<50
8/10/2016	42			9.7J	<4	<10	<10	57000	3J	1160	<0.2	<10	<7	<50		
5/18/2016	71			13	<4	<10	<10	63000	<100	1270	<0.2	<10	<7	<50		
2/23/2016	43			9J	<4	<10	<10	56000	<10	1050	<0.2	<10	<7	9J		
11/24/2015	46			11	<4	5.3J	<10	68000	<100	1240	<0.2	<10	<7	<50		
8/26/2015	44			10	<4	<10	<10	61000	<10	1190	<1.0	<10	<7	46 J		
5/13/2015	42			9.0 J	<4	<10	<10	52000	<10	996	<0.2	<10	<7	<50		
11/10/2014	44			11	<3	<3	<3	64000	<3	1100	<0.3	<15	<2	<60		
9/3/2014	43			10	<3	<3	<3	69000	<3	1100	<0.3	<15	<2	<60		
5/19/2014	41			11	<3	<3	<3	64000	<3	1100	<0.3	<15	<2	<60		
2/27/2014	23			10	5.0	<2	<3	78000	<6	1400	<0.5	<6.0	<2	16		
11/25/2013	<3			7.1	<3	<3	<3	33000	<3	1100	NS	<15	<3.0	<60		
9/5/2013	38			10	<3	<3	<3	68000	<3	1100	<0.3	<15	<3.0	<60		
5/8/2013	37			9	<3	<3	<3	64000	<3	980	<0.5	<15	<3.0	<60		
2/14/2013	41			12	<3	<3	<3	69000	<3	1100	<0.5	<15	<2.0	<60		
12/6/2012	39			11	<3	<3	<3	72000	<3	1100	<0.5	<15	<2.0	<60		
10/9/2012	40	11	<3	<3	<3	65000	<3	1000	<0.5	<15	<2.0	<100				
7/10/2012	42	<3	<3	<3	<3	68000	<3	1100	<0.5	<15	<2.0	<100				
3/20/2012	44	11	<3	<3	<3	65000	<3	1400	<0.5	<15	<2.0	<60				
MW 3S		12/6/2012	<3	30	<3	<3	<3	250	<3	280	<0.5	<15	<2.0	<60		
MW 4D		12/6/2012	<3	28	<3	<3	<3	<100	<3	160	<0.5	<15	<2.0	<60		

Notes: GW-1 and GW-3 MCP Method 1 Standards
MMCL-Massachusetts Max. Contaminant Level
SMCL-Secondary Max. Contaminant Level
NS - Not Sampled
J - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B - Analyte detected in Blank and Sample
* DPW Well sample was not filtered and results are therefore total metals rather than dissolved.
** Residential samples will be tested for metals during 2nd quarter of the year.

Property	Sample Frequency	Date	Arsenic	Barium	Cadmium	Chromium	Copper	Iron	Lead	Manganese	Mercury	Selenium	Silver	Zinc	
MW 4S	Annual	11/29/2016	<5	28	<4	<10	<10	2100	<10	4660	<0.2	<10	<7	<50	
		11/24/2015	<5	29	<4	4.9J	<10	2800	<10	5010	<0.2	<10	<7	<50	
		12/16/2014	6.0	35	<4	<10	<10	8700	<10	2690	<0.2	<10	<7	<50	
		12/18/2013	<3	24	<3	<3	<3	2100	<3	4200	<0.3	<15	<3.0	<60	
		12/6/2012	3.4	28	<3	<3	<3	2400	<3	5100	<0.5	<15	<2.0	<60	
		7/10/2012	<3	31	<3	<3	<3	2400	<3	4400	<0.5	<15	<2.0	<100	
MW 5D		12/5/2012	<3	64	<3	<3	<3	<150	<3	51	<0.5	<15	<2.0	<60	
MW 5S	Annual	11/29/2016	<5	37	<4	<10	<10	7800	<10	2810	<0.2	<10	<7	<50	
		11/24/2015	<5	49	<4	5J	<10	6800	<10	2700	<0.2	<10	<7	<50	
		12/16/2014	<5.0	22	<4	<10	<10	2000	2.0 J	4530	<0.2	<10	<7	<50	
		12/18/2013	<3	37	<3	<3	<3	8600	<3	3200	<0.3	<15	<3.0	<60	
		12/5/2012	<3	44	<3	<3	<3	5500	<3	3600	<0.5	<15	<2.0	<60	
		7/10/2012	<3	47	<3	<3	<3	8500	<3	3200	<0.5	<15	<2.0	<100	
MW 8	Annual	12/18/2013	<3	35	<3	<3	<3	<100	<3	300	<0.3	<15	<3.0	<60	
265 ALSTON AVENUE	Annual	5/12/2016	<0.5	13.8	<0.5	<1	80.8	<50	1.6	2.8	<0.2	<5.0	<0.5	32.1	
		4/1/2015	<0.5	13.4	<0.2	<0.5	15.1	<50	<0.5	3.3	<0.2	<1.0	<0.5	8.3	
		4/1/2015	Duplicate	NS	12.5	NS	NS	21.9	NS	NS	3.4	NS	NS	NS	6.7
		12/18/2013		0.11J	13B	<0.5	0.43J	220B	NS	1.2	NS	<0.20	<1.0	<0.50	39B
		12/6/2012		<3	13	<3	<3	27	NS	3.3	NS	<0.5	<15	<3.0	<60
		6/21/2012		<10	10	<1	<2	<100	<100	<6	<100	<0.5	<6.0	<2.0	<100
280 ALSTON AVENUE	Annual	5/12/2016	<0.5	12.5	<0.5	<1	99.6	165	<1.0	13.9	<0.2	<5.0	<0.5	44.7	
		5/13/2015	<0.5	24.7	<0.2	<0.5	35.5	64	0.6	20.3	<0.2	<1.0	<0.5	60.7	
		5/13/2015	Duplicate	NS	21.2	NS	NS	52.7	62	<0.5	19.7	NS	NS	NS	69.9
		12/18/2013		0.26J	22B	<0.5	0.29J	840B	NS	1.9	NS	<0.20	<1.0	0.025J	1200B
		12/6/2012		<3	19	<3	<3	1300	NS	5.1	NS	<0.5	<15	<3.0	350
		6/21/2012		<10	14	<1	<2	<100	<100	<6	<100	<0.5	<6.0	<2.0	<100
125 MEETINGHOUSE ROAD	Annual	7/21/2016	3J	45	<4	<10	NS	NS	<10	NS	<0.2	<10	<7	22J	
		7/21/2016	Duplicate	<5	49	<4	<10	NS	NS	<10	NS	<0.2	<10	<7	16J
		5/8/2013		<3	42	<3	<3	25	NS	<3	NS	<0.3	<15	<3.0	<60
		6/21/2012		<10	42	<1	<2	<100	<100	<6	430	<0.5	<6.0	<2.0	<100
75 OLD ORCHARD ROAD	Annual	5/12/2016	<0.5	7.6	<0.5	2.0	1844	90	4.3	4.5	<0.2	<5.0	<0.5	157.3	
		12/6/2012	<3	9	<3	<3	79	NS	<3	NS	<0.5	<15	<3.0	<60	
		6/21/2012	<10	6	<1	<2	<100	<100	<6	<100	<0.5	<6.0	<2.0	<100	
130 OLD ORCHARD ROAD		12/6/2012	<3	16	<3	<3	18	NS	<3	NS	<0.5	<15	<3.0	<60	
		6/21/2012	<10	12	<1	<2	<100	<100	<6	<100	<0.5	<6.0	<2.0	<100	
130A OLD ORCHARD ROAD	Annual	5/29/2015	<0.5	11.4	<0.2	<3	107.4	<50	1.0	4.2	<0.2	<1.0	<0.5	6.9	
		5/29/2015	Duplicate	NS	11.7	NS	NS	111.7	NS	0.8	4.1	NS	NS	NS	6.7
		12/18/2013		<1	16B	<0.5	0.21J	180B	NS	0.91J	NS	<0.20	<1.0	0.037J	13B

Notes: GW-1 and GW-3 MCP Method 1 Standards
MMCL-Massachusetts Max. Contaminant Level
SMCL-Secondary Max. Contaminant Level
NS - Not Sampled
J - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B - Analyte detected in Blank and Sample
* DPW Well sample was not filtered and results are therefore total metals rather than dissolved.
** Residential samples will be tested for metals during 2nd quarter of the year.



Property	Sample Frequency	Date	Arsenic	Barium	Cadmium	Chromium	Copper	Iron	Lead	Manganese	Mercury	Selenium	Silver	Zinc	
130B OLD ORCHARD ROAD	Annual	5/13/2016	<0.5	23.8	<0.5	1.3	29.6	<50	<1.0	3	<0.2	<5.0	<0.5	<10	
		5/29/2015	<0.5	11.0	<0.2	<3	27.9	<50	0.8	<1.0	<0.2	<1.0	<0.5	9.6	
		5/29/2015	Duplicate	NS	11.3	NS	NS	102.2	NS	<0.5	NS	NS	NS	NS	15.4
		12/18/2013	<1	13B	<0.5	0.074J	92B	NS	0.63J	NS	<0.20	<1.0	<0.50	16B	
210 OLD ORCHARD ROAD	Annual	5/13/2016	<0.5	65.8	<0.5	1.2	127.8	81	<1.0	2069	<0.2	<5.0	<0.5	<10	
		12/18/2013	<1	59B	<0.5	<1.5	50B	NS	4.1	NS	<0.20	<1.0	<0.50	89B	
		12/6/2012	<3	55	<3	<3	18	NS	<3	NS	<0.5	<15	<3.0	<60	
		6/21/2012	<10	54	<1	<2	<100	<100	<6	540	<0.5	<6.0	<2.0	<100	
290 OLD ORCHARD ROAD	Annual	5/12/2016	<0.5	43.5	<0.5	<1	238	<50	3.3	89.1	<0.2	<5.0	<0.5	26.3	
		4/1/2015	<0.5	38.8	<0.2	<0.5	64.9	<50	<0.5	78.1	<0.2	<1.0	<0.5	23.9	
		4/1/2015	Duplicate	NS	39.3	NS	NS	65.4	NS	NS	77.7	NS	NS	NS	21.2
		6/21/2012	<10	25	<1	<2	160	<100	<6	<100	<0.5	<6.0	<2.0	<100	

Notes: GW-1 and GW-3 MCP Method 1 Standards
MMCL-Massachusetts Max. Contaminant Level
SMCL-Secondary Max. Contaminant Level
NS - Not Sampled
J - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B - Analyte detected in Blank and Sample
* DPW Well sample was not filtered and results are therefore total metals rather than dissolved.
** Residential samples will be tested for metals during 2nd quarter of the year.



TABLE 4.3
SUMMARY OF LANDFILL MONITORING PLAN
GROUNDWATER ANALYTICAL RESULTS
Inorganic Indicator Parameters

Eastham Landfill
Eastham, MA

Property	Sample Frequency	Date	Alkalinity mg/L as CaCO	Chloride mg/L	COD mg/L	Total Cyanide mg/L	Nitrate mg/L	Sulfate mg/L	Total Dissolved Solids mg/L
Standards									
MMCL						0.2	10		
SMCL				250				250	500
Results									
ESMW-1D	SemiAnnually	9/21/2016	NS	NS	NS	NS	1.71	8.3J	NS
ESMW-1I	SemiAnnually	9/21/2016	NS	NS	NS	NS	16.4	6.4J	NS
ESMW-1S	SemiAnnually	9/21/2016	NS	NS	NS	NS	32.8	13	NS
ESMW-2D	SemiAnnually	9/21/2016	NS	NS	NS	NS	<0.1	14	NS
ESMW-2I	SemiAnnually	9/21/2016	NS	NS	NS	NS	0.030J	2.2J	NS
ESMW-2S	SemiAnnually	9/21/2016	NS	NS	NS	NS	<0.1	1.8J	NS
ESMW-3D	SemiAnnually	9/21/2016	NS	NS	NS	NS	1.23	10	NS
ESMW-3I	SemiAnnually	9/21/2016	NS	NS	NS	NS	<0.1	6.5J	NS
ESMW-3S	SemiAnnually	9/21/2016	NS	NS	NS	NS	1.59	18	NS
ESMW-4D	SemiAnnually	9/21/2016	NS	NS	NS	NS	2.8	5.8J	NS
ESMW-4I	SemiAnnually	9/21/2016	NS	NS	NS	NS	4.31	7.4J	NS
MW 2D		12/6/2012	23	22	<3.0	NS	0.6	6.7	81
MW 2S	Annual	11/29/2016	121	22	26	<0.005	<0.100	25	150
		11/24/2015	139	22	10.J	<0.005	0.061J	26	200
		12/16/2014	126	24	5.2 J	<0.005	<0.100	22	160
		12/18/2013	140	26	<5.0	<0.010	<0.05	24	310
		12/6/2012	150	27	<3.0	NS	0.45	40	280
		7/10/2012	150	28	10	<0.010	0.27	36	300

Notes: GW-1 and GW-3 MCP Method 1 Standards
MMCL-Massachusetts Max. Contaminant Level
SMCL-Secondary Max. Contaminant Level
NS - Not Sampled
J - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.



Property	Sample Frequency	Date	Alkalinity mg/L as CaCO	Chloride mg/L	COD mg/L	Total Cyanide mg/L	Nitrate mg/L	Sulfate mg/L	Total Dissolved Solids mg/L	
MW 3D	Quarterly	3/1/2017	547	58	33	<0.005	<0.1	47	460	
		11/29/2016	557	56	52	<0.005	<0.100	56	460	
		8/10/2016	561	64	44	<0.005	<0.100	49	530	
		5/18/2016	599	65	47	<0.005	0.048J	50	600	
		2/23/2016	563	64	48	<0.005	0.096J	52	540	
		11/24/2015	638	64	60	<0.005	0.044J	59	630	
		8/26/2015	673	70	48	<0.005	<0.100	46	600	
		5/13/2015	669	74	77	<0.005	<0.500	59	630	
		11/10/2014	680	91	56	<0.010	1.7	58	1,200	
		11/10/2014	Duplicate	670	91	54	<0.010	1.7	57	1,200
		9/3/2014	780	85	50	<0.010	<0.10	54	1,200	
		5/19/2014	830	80	27	<0.010	<0.10	51	1,300	
		2/27/2014	720	86	62	<0.010	8.0	35	1,200	
		11/25/2013	840	100	50	<0.010	3.1	58	1,200	
		9/5/2013	870	96	56	<0.010	<0.10	66	2,500	
		5/8/2013	870	100	63	<0.010	0.87	68	1,400	
		2/14/2013	920	120	70	<0.010	<0.10	68	1,600	
		12/6/2012	960	91	63	NS	1.4	73	1,700	
		10/9/2012	960	130	5.8	<0.010	6.2	70	1,500	
		7/10/2012	970	100	71	<0.010	0.72	67	1,700	
3/20/2012	1,000	240	62	<0.010	1.7	68	1,500			
MW 3I	Quarterly	3/1/2017	157	12	<20	<0.005	<0.1	33	140	
		11/29/2016	156	10	26	<0.005	0.154	40	130	
		8/10/2016	142	10	11.J	<0.005	<0.100	20	240	
		5/18/2016	161	11	17.J	<0.005	0.108	34	210	
		2/23/2016	111	10	15.J	<0.005	0.155	29	210	
		11/24/2015	136	10	25	<0.005	0.079J	31	230	
		8/26/2015	162	13	12.J	<0.005	<0.100	27	200	
		5/13/2015	149	13	<20	<0.005	<1.0	29	200	
		11/10/2014	110	23	15	<0.010	1.1	25	260	
		9/3/2014	200	20	16	<0.010	<0.10	30	300	
		5/19/2014	200	19	20	<0.010	<0.10	29	300	
		2/27/2014	110	17	22	<0.010	0.60	36	300	
		11/25/2013	200	16	9.0	<0.010	1.4	46	260	
		9/5/2013	190	12	13	<0.010	<0.10	39	240	
		5/8/2013	160	13	7.0	<0.010	0.32	49	260	
		2/14/2013	180	14	15	<0.010	0.14	70	250	
		12/6/2012	190	10	17	NS	0.35	81	290	
10/9/2012	180	12	<3.0	<0.010	<0.10	79	270			
7/10/2012	180	19	18	<0.010	0.19	66	320			
3/20/2012	180	19	15	<0.010	0.42	63	290			
MW 3S		12/6/2012	16	10	<3.0	NS	3.0	10	61	
MW 4D		12/6/2012	16	50	<3.0	NS	2.3	18	140	

Notes: GW-1 and GW-3 MCP Method 1 Standards
MMCL-Massachusetts Max. Contaminant Level
SMCL-Secondary Max. Contaminant Level
NS - Not Sampled
J - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.



Property	Sample Frequency	Date	Alkalinity mg/L as CaCO	Chloride mg/L	COD mg/L	Total Cyanide mg/L	Nitrate mg/L	Sulfate mg/L	Total Dissolved Solids mg/L
MW 4S	Annual	11/29/2016	173	22	26	<0.005	<0.100	20	180
		11/24/2015	168	18	22	<0.005	0.033J	15	<10
		12/16/2014	166	21	12 J	<0.005	<0.500	14	190
		12/18/2013	170	20	6.0	<0.010	<0.05	14	300
		12/6/2012	180	21	14	NS	<0.10	22	240
		7/10/2012	180	26	13	<0.010	0.18	20	300
MW 5D		12/5/2012	23	77	<3.0	NS	2.3	25	230
MW 5S	Annual	11/29/2016	190	32	33	<0.005	<0.100	22	210
		11/24/2015	201	25	22	<0.005	0.037J	22	250
		12/16/2014	198	18	26	<0.005	<0.500	20	220
		12/18/2013	210	28	11	<0.010	0.40	22	370
		12/5/2012	200	34	8.0	NS	0.45	29	320
		7/10/2012	220	33	12	<0.010	0.28	29	380
MW 8	Annual	12/18/2013	110	34	<2.0	<0.010	1.6	16	280
75 OLD ORCHARD ROAD		6/21/2012	26	25	<3.0	<0.010	1.0	7.8	96
130 OLD ORCHARD ROAD		6/21/2012	37	69	<3.0	<0.010	3.5	8.6	220
180 OLD ORCHARD ROAD		6/21/2012	11	32	<3.0	<0.010	2.0	14	120
		3/23/2012	NS	35	<3.0	<0.010	2.0	16	100
210 OLD ORCHARD ROAD		6/21/2012	42	42	<3.0	<0.010	2.4	23	170
290 OLD ORCHARD ROAD		6/21/2012	17	32	<3.0	<0.010	3.3	14	130

Notes: GW-1 and GW-3 MCP Method 1 Standards
MMCL-Massachusetts Max. Contaminant Level
SMCL-Secondary Max. Contaminant Level
NS - Not Sampled
J - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.





March 31, 2017

Town of Eastham Board of Health
2500 State Highway
Eastham, MA 02642-2544

Eastham Board of Selectmen
Eastham Town Hall
2500 State Highway
Eastham MA 02643-2544

Subject: Immediate Response Action Status Report -4th Quarter 2016
Town of Eastham Landfill
255 Old Orchard Road, Eastham MA
RTN 4-24301

Notice is hereby given that the above referenced document has been submitted electronically to the Massachusetts Department of Environmental Protection (MassDEP).

The objective of the Immediate Response Action program is to identify private water wells in the vicinity of the Eastham Landfill that have been impacted by 1,4 dioxane, and to provide alternative safe drinking water to affected residents. In addition, the IRA program includes implementation of appropriate and feasible mitigating measures to remove 1,4 dioxane and other VOCs related to the Eastham landfill from drinking water. This IRA Status report (and the incorporated Landfill Monitoring Plan report) discusses activities completed between December 1, 2016, and February 28, 2017.

The submitted documents for this RTN can be viewed on line at <http://public.dep.state.ma.us/fileviewer/Rtn.aspx?rtn=4-0024301> or at the MassDEP Southeast regional office. For more information about these options, please visit <http://www.mass.gov/eea/agencies/massdep/>.

If you have any questions, please contact our office at 508-226-1800.

Sincerely,
Environmental Strategies & Management, Inc.

A handwritten signature in black ink, appearing to read 'D. Heely', is written over a white background.

Douglas Heely, LSP

Copy: MassDEP Southeast Region

ES&M QAQC Review Log

Lab	Project Number	Sample Date	Matrix	CAM Form Included?	Lab Presumptive Certainty?	QC Performance Standards Met?	Reporting Limits Achieved?	All Analytes Reported?	Data Usability Status
Alpha	L1706325	3/1/2017	GW	Yes	Yes	No	Yes	No	Usable - CAM Compliant

Sample ID	Date	Lab ID	Matrix	Analysis
MW-3I	3/1/2017	L1706325-01	GW	8270, 8260, metals, TDS, sulfate, chloride, nitrate, alkalinity, COD, cyanide
MW-3D	3/1/2017	L1706325-01	GW	8270, 8260, metals, TDS, sulfate, chloride, nitrate, alkalinity, COD, cyanide
Trip Blank	3/1/2017	L1706325-01	GW	8260

VOCs - The initial calibration, associated with L1706325-01 and -03, did not meet the method required minimum response factor on the lowest calibration standard for 1,4-dioxane (0.0015), as well as the average response factor for 1,4-dioxane.

VOCs - The initial calibration, associated with L1706325-02, did not meet the method required minimum response factor on the lowest calibration standard for 4-methyl-2-pentanone (0.0761) and 1,4-dioxane (0.0017), as well as the average response factor for 4-methyl-2-pentanone and 1,4-dioxane.

VOCs - The continuing calibration standards, associated with L1706325-01, -02, and -03, are outside the acceptance criteria for several compounds; however, they are within overall method allowances. Copies of the continuing calibration standards are included as an addendum to this report.

COD - The WG982398-4 Laboratory Duplicate RPD (24%), performed on L1706325-02, is above the acceptance criteria; however, the sample and duplicate results are less than five times the reporting limit. Therefore, the RPD is valid.

All QAQC data, including surrogate, trip blank, method blank, laboratory control sample (LCS), LCS duplicate, matrix spike and lab duplicate results were reviewed. This report was deemed usable by Angela Boyd on 3/30/17.



ANALYTICAL REPORT

Lab Number:	L1706325
Client:	Environmental Strategies & Mgmt. 273 West Main Street Norton, MA 02766
ATTN:	Lisa Flynn
Phone:	(508) 226-1800
Project Name:	EASTHAM LANDFILL
Project Number:	2015-055
Report Date:	03/07/17

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), NJ NELAP (MA935), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-14-00197).

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com



Project Name: EASTHAM LANDFILL
Project Number: 2015-055

Lab Number: L1706325
Report Date: 03/07/17

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1706325-01	MW-3I	WATER	EASTHAM, MA	03/01/17 11:30	03/01/17
L1706325-02	MW-3D	WATER	EASTHAM, MA	03/01/17 11:30	03/01/17
L1706325-03	TRIPBLANK	WATER	EASTHAM, MA	03/01/17 00:00	03/01/17

Project Name: EASTHAM LANDFILL

Lab Number: L1706325

Project Number: 2015-055

Report Date: 03/07/17

MADEP MCP Response Action Analytical Report Certification

This form provides certifications for all samples performed by MCP methods. Please refer to the Sample Results and Container Information sections of this report for specification of MCP methods used for each analysis. The following questions pertain only to MCP Analytical Methods.

An affirmative response to questions A through F is required for "Presumptive Certainty" status		
A	Were all samples received in a condition consistent with those described on the Chain-of-Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding times?	YES
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	YES
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?	YES
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data?"	YES
E a.	VPH, EPH, and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications).	N/A
E b.	APH and TO-15 Methods only: Was the complete analyte list reported for each method?	N/A
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to Questions A through E)?	YES
A response to questions G, H and I is required for "Presumptive Certainty" status		
G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?	YES
H	Were all QC performance standards specified in the CAM protocol(s) achieved?	NO
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	NO
For any questions answered "No", please refer to the case narrative section on the following page(s).		

Please note that sample matrix information is located in the Sample Results section of this report.



Project Name: EASTHAM LANDFILL
Project Number: 2015-055

Lab Number: L1706325
Report Date: 03/07/17

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. All specific QC information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances the specific failure is not narrated but noted in the associated QC table. The information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

HOLD POLICY

For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Client Service Representative and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Client Services at 800-624-9220 with any questions.

Project Name: EASTHAM LANDFILL
Project Number: 2015-055

Lab Number: L1706325
Report Date: 03/07/17

Case Narrative (continued)

MCP Related Narratives

Volatile Organics

In reference to question H:

The initial calibration, associated with L1706325-01 and -03, did not meet the method required minimum response factor on the lowest calibration standard for 1,4-dioxane (0.0015), as well as the average response factor for 1,4-dioxane.

The initial calibration, associated with L1706325-02, did not meet the method required minimum response factor on the lowest calibration standard for 4-methyl-2-pentanone (0.0761) and 1,4-dioxane (0.0017), as well as the average response factor for 4-methyl-2-pentanone and 1,4-dioxane.

The continuing calibration standards, associated with L1706325-01, -02, and -03, are outside the acceptance criteria for several compounds; however, they are within overall method allowances. Copies of the continuing calibration standards are included as an addendum to this report.

1,4-Dioxane by 8270-SIM

In reference to question I:

All samples were analyzed for a subset of MCP analytes per the Chain of Custody.

Metals

In reference to question I:

All samples were analyzed for a subset of MCP analytes per the Chain of Custody.

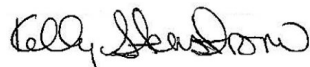
Non-MCP Related Narratives

Chemical Oxygen Demand

The WG982398-4 Laboratory Duplicate RPD (24%), performed on L1706325-02, is above the acceptance criteria; however, the sample and duplicate results are less than five times the reporting limit. Therefore, the RPD is valid.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:

 Kelly Stenstrom

Title: Technical Director/Representative

Date: 03/07/17

ORGANICS

VOLATILES

Project Name: EASTHAM LANDFILL
Project Number: 2015-055

Lab Number: L1706325
Report Date: 03/07/17

SAMPLE RESULTS

Lab ID: L1706325-01
 Client ID: MW-3I
 Sample Location: EASTHAM, MA
 Matrix: Water
 Analytical Method: 97,8260C
 Analytical Date: 03/06/17 07:44
 Analyst: MM

Date Collected: 03/01/17 11:30
 Date Received: 03/01/17
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Methylene chloride	ND		ug/l	2.0	--	1
1,1-Dichloroethane	ND		ug/l	1.0	--	1
Chloroform	ND		ug/l	1.0	--	1
Carbon tetrachloride	ND		ug/l	1.0	--	1
1,2-Dichloropropane	ND		ug/l	1.0	--	1
Dibromochloromethane	ND		ug/l	1.0	--	1
1,1,2-Trichloroethane	ND		ug/l	1.0	--	1
Tetrachloroethene	ND		ug/l	1.0	--	1
Chlorobenzene	ND		ug/l	1.0	--	1
Trichlorofluoromethane	ND		ug/l	2.0	--	1
1,2-Dichloroethane	ND		ug/l	1.0	--	1
1,1,1-Trichloroethane	ND		ug/l	1.0	--	1
Bromodichloromethane	ND		ug/l	1.0	--	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	--	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	--	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	--	1
1,1-Dichloropropene	ND		ug/l	2.0	--	1
Bromoform	ND		ug/l	2.0	--	1
1,1,2,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Benzene	ND		ug/l	0.50	--	1
Toluene	ND		ug/l	1.0	--	1
Ethylbenzene	ND		ug/l	1.0	--	1
Chloromethane	ND		ug/l	2.0	--	1
Bromomethane	ND		ug/l	2.0	--	1
Vinyl chloride	ND		ug/l	1.0	--	1
Chloroethane	ND		ug/l	2.0	--	1
1,1-Dichloroethene	ND		ug/l	1.0	--	1
trans-1,2-Dichloroethene	ND		ug/l	1.0	--	1
Trichloroethene	ND		ug/l	1.0	--	1
1,2-Dichlorobenzene	ND		ug/l	1.0	--	1

Project Name: EASTHAM LANDFILL

Lab Number: L1706325

Project Number: 2015-055

Report Date: 03/07/17

SAMPLE RESULTS

Lab ID: L1706325-01
 Client ID: MW-3I
 Sample Location: EASTHAM, MA

Date Collected: 03/01/17 11:30
 Date Received: 03/01/17
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/l	1.0	--	1
1,4-Dichlorobenzene	ND		ug/l	1.0	--	1
Methyl tert butyl ether	ND		ug/l	2.0	--	1
p/m-Xylene	ND		ug/l	2.0	--	1
o-Xylene	ND		ug/l	1.0	--	1
Xylene (Total)	ND		ug/l	1.0	--	1
cis-1,2-Dichloroethene	ND		ug/l	1.0	--	1
1,2-Dichloroethene (total)	ND		ug/l	1.0	--	1
Dibromomethane	ND		ug/l	2.0	--	1
1,2,3-Trichloropropane	ND		ug/l	2.0	--	1
Styrene	ND		ug/l	1.0	--	1
Dichlorodifluoromethane	ND		ug/l	2.0	--	1
Acetone	ND		ug/l	5.0	--	1
Carbon disulfide	ND		ug/l	2.0	--	1
2-Butanone	ND		ug/l	5.0	--	1
4-Methyl-2-pentanone	ND		ug/l	5.0	--	1
2-Hexanone	ND		ug/l	5.0	--	1
Bromochloromethane	ND		ug/l	2.0	--	1
Tetrahydrofuran	ND		ug/l	2.0	--	1
2,2-Dichloropropane	ND		ug/l	2.0	--	1
1,2-Dibromoethane	ND		ug/l	2.0	--	1
1,3-Dichloropropane	ND		ug/l	2.0	--	1
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Bromobenzene	ND		ug/l	2.0	--	1
n-Butylbenzene	ND		ug/l	2.0	--	1
sec-Butylbenzene	ND		ug/l	2.0	--	1
tert-Butylbenzene	ND		ug/l	2.0	--	1
o-Chlorotoluene	ND		ug/l	2.0	--	1
p-Chlorotoluene	ND		ug/l	2.0	--	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.0	--	1
Hexachlorobutadiene	ND		ug/l	0.60	--	1
Isopropylbenzene	ND		ug/l	2.0	--	1
p-Isopropyltoluene	ND		ug/l	2.0	--	1
Naphthalene	ND		ug/l	2.0	--	1
n-Propylbenzene	ND		ug/l	2.0	--	1
1,2,3-Trichlorobenzene	ND		ug/l	2.0	--	1
1,2,4-Trichlorobenzene	ND		ug/l	2.0	--	1
1,3,5-Trimethylbenzene	ND		ug/l	2.0	--	1
1,2,4-Trimethylbenzene	ND		ug/l	2.0	--	1

Project Name: EASTHAM LANDFILL
Project Number: 2015-055

Lab Number: L1706325
Report Date: 03/07/17

SAMPLE RESULTS

Lab ID: L1706325-01
 Client ID: MW-3I
 Sample Location: EASTHAM, MA

Date Collected: 03/01/17 11:30
 Date Received: 03/01/17
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
-----------	--------	-----------	-------	----	-----	-----------------

MCP Volatile Organics - Westborough Lab

Ethyl ether	ND		ug/l	2.0	--	1
Isopropyl Ether	ND		ug/l	2.0	--	1
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.0	--	1
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0	--	1
1,4-Dioxane	ND		ug/l	250	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	92		70-130
Toluene-d8	102		70-130
4-Bromofluorobenzene	87		70-130
Dibromofluoromethane	96		70-130

Project Name: EASTHAM LANDFILL
Project Number: 2015-055

Lab Number: L1706325
Report Date: 03/07/17

SAMPLE RESULTS

Lab ID: L1706325-02
 Client ID: MW-3D
 Sample Location: EASTHAM, MA
 Matrix: Water
 Analytical Method: 97,8260C
 Analytical Date: 03/07/17 07:15
 Analyst: MM

Date Collected: 03/01/17 11:30
 Date Received: 03/01/17
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Methylene chloride	ND		ug/l	2.0	--	1
1,1-Dichloroethane	ND		ug/l	1.0	--	1
Chloroform	ND		ug/l	1.0	--	1
Carbon tetrachloride	ND		ug/l	1.0	--	1
1,2-Dichloropropane	ND		ug/l	1.0	--	1
Dibromochloromethane	ND		ug/l	1.0	--	1
1,1,2-Trichloroethane	ND		ug/l	1.0	--	1
Tetrachloroethene	ND		ug/l	1.0	--	1
Chlorobenzene	ND		ug/l	1.0	--	1
Trichlorofluoromethane	ND		ug/l	2.0	--	1
1,2-Dichloroethane	ND		ug/l	1.0	--	1
1,1,1-Trichloroethane	ND		ug/l	1.0	--	1
Bromodichloromethane	ND		ug/l	1.0	--	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	--	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	--	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	--	1
1,1-Dichloropropene	ND		ug/l	2.0	--	1
Bromoform	ND		ug/l	2.0	--	1
1,1,2,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Benzene	0.64		ug/l	0.50	--	1
Toluene	1.0		ug/l	1.0	--	1
Ethylbenzene	ND		ug/l	1.0	--	1
Chloromethane	ND		ug/l	2.0	--	1
Bromomethane	ND		ug/l	2.0	--	1
Vinyl chloride	ND		ug/l	1.0	--	1
Chloroethane	ND		ug/l	2.0	--	1
1,1-Dichloroethene	ND		ug/l	1.0	--	1
trans-1,2-Dichloroethene	ND		ug/l	1.0	--	1
Trichloroethene	ND		ug/l	1.0	--	1
1,2-Dichlorobenzene	ND		ug/l	1.0	--	1

Project Name: EASTHAM LANDFILL

Lab Number: L1706325

Project Number: 2015-055

Report Date: 03/07/17

SAMPLE RESULTS

Lab ID: L1706325-02
 Client ID: MW-3D
 Sample Location: EASTHAM, MA

Date Collected: 03/01/17 11:30
 Date Received: 03/01/17
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/l	1.0	--	1
1,4-Dichlorobenzene	ND		ug/l	1.0	--	1
Methyl tert butyl ether	ND		ug/l	2.0	--	1
p/m-Xylene	ND		ug/l	2.0	--	1
o-Xylene	ND		ug/l	1.0	--	1
Xylene (Total)	ND		ug/l	1.0	--	1
cis-1,2-Dichloroethene	1.3		ug/l	1.0	--	1
1,2-Dichloroethene (total)	1.3		ug/l	1.0	--	1
Dibromomethane	ND		ug/l	2.0	--	1
1,2,3-Trichloropropane	ND		ug/l	2.0	--	1
Styrene	ND		ug/l	1.0	--	1
Dichlorodifluoromethane	ND		ug/l	2.0	--	1
Acetone	ND		ug/l	5.0	--	1
Carbon disulfide	ND		ug/l	2.0	--	1
2-Butanone	ND		ug/l	5.0	--	1
4-Methyl-2-pentanone	ND		ug/l	5.0	--	1
2-Hexanone	ND		ug/l	5.0	--	1
Bromochloromethane	ND		ug/l	2.0	--	1
Tetrahydrofuran	ND		ug/l	2.0	--	1
2,2-Dichloropropane	ND		ug/l	2.0	--	1
1,2-Dibromoethane	ND		ug/l	2.0	--	1
1,3-Dichloropropane	ND		ug/l	2.0	--	1
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Bromobenzene	ND		ug/l	2.0	--	1
n-Butylbenzene	ND		ug/l	2.0	--	1
sec-Butylbenzene	ND		ug/l	2.0	--	1
tert-Butylbenzene	ND		ug/l	2.0	--	1
o-Chlorotoluene	ND		ug/l	2.0	--	1
p-Chlorotoluene	ND		ug/l	2.0	--	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.0	--	1
Hexachlorobutadiene	ND		ug/l	0.60	--	1
Isopropylbenzene	ND		ug/l	2.0	--	1
p-Isopropyltoluene	ND		ug/l	2.0	--	1
Naphthalene	ND		ug/l	2.0	--	1
n-Propylbenzene	ND		ug/l	2.0	--	1
1,2,3-Trichlorobenzene	ND		ug/l	2.0	--	1
1,2,4-Trichlorobenzene	ND		ug/l	2.0	--	1
1,3,5-Trimethylbenzene	ND		ug/l	2.0	--	1
1,2,4-Trimethylbenzene	ND		ug/l	2.0	--	1

Project Name: EASTHAM LANDFILL
Project Number: 2015-055

Lab Number: L1706325
Report Date: 03/07/17

SAMPLE RESULTS

Lab ID: L1706325-02
 Client ID: MW-3D
 Sample Location: EASTHAM, MA

Date Collected: 03/01/17 11:30
 Date Received: 03/01/17
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Ethyl ether	19		ug/l	2.0	--	1
Isopropyl Ether	ND		ug/l	2.0	--	1
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.0	--	1
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0	--	1
1,4-Dioxane	ND		ug/l	250	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	90		70-130
Toluene-d8	91		70-130
4-Bromofluorobenzene	88		70-130
Dibromofluoromethane	104		70-130

Project Name: EASTHAM LANDFILL
Project Number: 2015-055

Lab Number: L1706325
Report Date: 03/07/17

SAMPLE RESULTS

Lab ID: L1706325-03
 Client ID: TRIPBLANK
 Sample Location: EASTHAM, MA
 Matrix: Water
 Analytical Method: 97,8260C
 Analytical Date: 03/06/17 07:10
 Analyst: MM

Date Collected: 03/01/17 00:00
 Date Received: 03/01/17
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Methylene chloride	ND		ug/l	2.0	--	1
1,1-Dichloroethane	ND		ug/l	1.0	--	1
Chloroform	ND		ug/l	1.0	--	1
Carbon tetrachloride	ND		ug/l	1.0	--	1
1,2-Dichloropropane	ND		ug/l	1.0	--	1
Dibromochloromethane	ND		ug/l	1.0	--	1
1,1,2-Trichloroethane	ND		ug/l	1.0	--	1
Tetrachloroethene	ND		ug/l	1.0	--	1
Chlorobenzene	ND		ug/l	1.0	--	1
Trichlorofluoromethane	ND		ug/l	2.0	--	1
1,2-Dichloroethane	ND		ug/l	1.0	--	1
1,1,1-Trichloroethane	ND		ug/l	1.0	--	1
Bromodichloromethane	ND		ug/l	1.0	--	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	--	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	--	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	--	1
1,1-Dichloropropene	ND		ug/l	2.0	--	1
Bromoform	ND		ug/l	2.0	--	1
1,1,2,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Benzene	ND		ug/l	0.50	--	1
Toluene	ND		ug/l	1.0	--	1
Ethylbenzene	ND		ug/l	1.0	--	1
Chloromethane	ND		ug/l	2.0	--	1
Bromomethane	ND		ug/l	2.0	--	1
Vinyl chloride	ND		ug/l	1.0	--	1
Chloroethane	ND		ug/l	2.0	--	1
1,1-Dichloroethene	ND		ug/l	1.0	--	1
trans-1,2-Dichloroethene	ND		ug/l	1.0	--	1
Trichloroethene	ND		ug/l	1.0	--	1
1,2-Dichlorobenzene	ND		ug/l	1.0	--	1

Project Name: EASTHAM LANDFILL

Lab Number: L1706325

Project Number: 2015-055

Report Date: 03/07/17

SAMPLE RESULTS

Lab ID: L1706325-03
 Client ID: TRIPBLANK
 Sample Location: EASTHAM, MA

Date Collected: 03/01/17 00:00
 Date Received: 03/01/17
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/l	1.0	--	1
1,4-Dichlorobenzene	ND		ug/l	1.0	--	1
Methyl tert butyl ether	ND		ug/l	2.0	--	1
p/m-Xylene	ND		ug/l	2.0	--	1
o-Xylene	ND		ug/l	1.0	--	1
Xylene (Total)	ND		ug/l	1.0	--	1
cis-1,2-Dichloroethene	ND		ug/l	1.0	--	1
1,2-Dichloroethene (total)	ND		ug/l	1.0	--	1
Dibromomethane	ND		ug/l	2.0	--	1
1,2,3-Trichloropropane	ND		ug/l	2.0	--	1
Styrene	ND		ug/l	1.0	--	1
Dichlorodifluoromethane	ND		ug/l	2.0	--	1
Acetone	ND		ug/l	5.0	--	1
Carbon disulfide	ND		ug/l	2.0	--	1
2-Butanone	ND		ug/l	5.0	--	1
4-Methyl-2-pentanone	ND		ug/l	5.0	--	1
2-Hexanone	ND		ug/l	5.0	--	1
Bromochloromethane	ND		ug/l	2.0	--	1
Tetrahydrofuran	ND		ug/l	2.0	--	1
2,2-Dichloropropane	ND		ug/l	2.0	--	1
1,2-Dibromoethane	ND		ug/l	2.0	--	1
1,3-Dichloropropane	ND		ug/l	2.0	--	1
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Bromobenzene	ND		ug/l	2.0	--	1
n-Butylbenzene	ND		ug/l	2.0	--	1
sec-Butylbenzene	ND		ug/l	2.0	--	1
tert-Butylbenzene	ND		ug/l	2.0	--	1
o-Chlorotoluene	ND		ug/l	2.0	--	1
p-Chlorotoluene	ND		ug/l	2.0	--	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.0	--	1
Hexachlorobutadiene	ND		ug/l	0.60	--	1
Isopropylbenzene	ND		ug/l	2.0	--	1
p-Isopropyltoluene	ND		ug/l	2.0	--	1
Naphthalene	ND		ug/l	2.0	--	1
n-Propylbenzene	ND		ug/l	2.0	--	1
1,2,3-Trichlorobenzene	ND		ug/l	2.0	--	1
1,2,4-Trichlorobenzene	ND		ug/l	2.0	--	1
1,3,5-Trimethylbenzene	ND		ug/l	2.0	--	1
1,2,4-Trimethylbenzene	ND		ug/l	2.0	--	1

Project Name: EASTHAM LANDFILL
Project Number: 2015-055

Lab Number: L1706325
Report Date: 03/07/17

SAMPLE RESULTS

Lab ID: L1706325-03
 Client ID: TRIPBLANK
 Sample Location: EASTHAM, MA

Date Collected: 03/01/17 00:00
 Date Received: 03/01/17
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
-----------	--------	-----------	-------	----	-----	-----------------

MCP Volatile Organics - Westborough Lab

Ethyl ether	ND		ug/l	2.0	--	1
Isopropyl Ether	ND		ug/l	2.0	--	1
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.0	--	1
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0	--	1
1,4-Dioxane	ND		ug/l	250	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	94		70-130
Toluene-d8	102		70-130
4-Bromofluorobenzene	88		70-130
Dibromofluoromethane	95		70-130

Project Name: EASTHAM LANDFILL
Project Number: 2015-055

Lab Number: L1706325
Report Date: 03/07/17

Method Blank Analysis
Batch Quality Control

Analytical Method: 97,8260C
Analytical Date: 03/06/17 06:37
Analyst: MM

Parameter	Result	Qualifier	Units	RL	MDL
MCP Volatile Organics - Westborough Lab for sample(s): 01,03 Batch: WG983125-5					
Methylene chloride	ND		ug/l	2.0	--
1,1-Dichloroethane	ND		ug/l	1.0	--
Chloroform	ND		ug/l	1.0	--
Carbon tetrachloride	ND		ug/l	1.0	--
1,2-Dichloropropane	ND		ug/l	1.0	--
Dibromochloromethane	ND		ug/l	1.0	--
1,1,2-Trichloroethane	ND		ug/l	1.0	--
Tetrachloroethene	ND		ug/l	1.0	--
Chlorobenzene	ND		ug/l	1.0	--
Trichlorofluoromethane	ND		ug/l	2.0	--
1,2-Dichloroethane	ND		ug/l	1.0	--
1,1,1-Trichloroethane	ND		ug/l	1.0	--
Bromodichloromethane	ND		ug/l	1.0	--
trans-1,3-Dichloropropene	ND		ug/l	0.50	--
cis-1,3-Dichloropropene	ND		ug/l	0.50	--
1,3-Dichloropropene, Total	ND		ug/l	0.50	--
1,1-Dichloropropene	ND		ug/l	2.0	--
Bromoform	ND		ug/l	2.0	--
1,1,2,2-Tetrachloroethane	ND		ug/l	1.0	--
Benzene	ND		ug/l	0.50	--
Toluene	ND		ug/l	1.0	--
Ethylbenzene	ND		ug/l	1.0	--
Chloromethane	ND		ug/l	2.0	--
Bromomethane	ND		ug/l	2.0	--
Vinyl chloride	ND		ug/l	1.0	--
Chloroethane	ND		ug/l	2.0	--
1,1-Dichloroethene	ND		ug/l	1.0	--
trans-1,2-Dichloroethene	ND		ug/l	1.0	--
Trichloroethene	ND		ug/l	1.0	--

Project Name: EASTHAM LANDFILL
Project Number: 2015-055

Lab Number: L1706325
Report Date: 03/07/17

Method Blank Analysis
Batch Quality Control

Analytical Method: 97,8260C
Analytical Date: 03/06/17 06:37
Analyst: MM

Parameter	Result	Qualifier	Units	RL	MDL
MCP Volatile Organics - Westborough Lab for sample(s): 01,03 Batch: WG983125-5					
1,2-Dichlorobenzene	ND		ug/l	1.0	--
1,3-Dichlorobenzene	ND		ug/l	1.0	--
1,4-Dichlorobenzene	ND		ug/l	1.0	--
Methyl tert butyl ether	ND		ug/l	2.0	--
p/m-Xylene	ND		ug/l	2.0	--
o-Xylene	ND		ug/l	1.0	--
Xylene (Total)	ND		ug/l	1.0	--
cis-1,2-Dichloroethene	ND		ug/l	1.0	--
1,2-Dichloroethene (total)	ND		ug/l	1.0	--
Dibromomethane	ND		ug/l	2.0	--
1,2,3-Trichloropropane	ND		ug/l	2.0	--
Styrene	ND		ug/l	1.0	--
Dichlorodifluoromethane	ND		ug/l	2.0	--
Acetone	ND		ug/l	5.0	--
Carbon disulfide	ND		ug/l	2.0	--
2-Butanone	ND		ug/l	5.0	--
4-Methyl-2-pentanone	ND		ug/l	5.0	--
2-Hexanone	ND		ug/l	5.0	--
Bromochloromethane	ND		ug/l	2.0	--
Tetrahydrofuran	ND		ug/l	2.0	--
2,2-Dichloropropane	ND		ug/l	2.0	--
1,2-Dibromoethane	ND		ug/l	2.0	--
1,3-Dichloropropane	ND		ug/l	2.0	--
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	--
Bromobenzene	ND		ug/l	2.0	--
n-Butylbenzene	ND		ug/l	2.0	--
sec-Butylbenzene	ND		ug/l	2.0	--
tert-Butylbenzene	ND		ug/l	2.0	--
o-Chlorotoluene	ND		ug/l	2.0	--

Project Name: EASTHAM LANDFILL
Project Number: 2015-055

Lab Number: L1706325
Report Date: 03/07/17

Method Blank Analysis
Batch Quality Control

Analytical Method: 97,8260C
Analytical Date: 03/06/17 06:37
Analyst: MM

Parameter	Result	Qualifier	Units	RL	MDL
MCP Volatile Organics - Westborough Lab for sample(s): 01,03 Batch: WG983125-5					
p-Chlorotoluene	ND		ug/l	2.0	--
1,2-Dibromo-3-chloropropane	ND		ug/l	2.0	--
Hexachlorobutadiene	ND		ug/l	0.60	--
Isopropylbenzene	ND		ug/l	2.0	--
p-Isopropyltoluene	ND		ug/l	2.0	--
Naphthalene	ND		ug/l	2.0	--
n-Propylbenzene	ND		ug/l	2.0	--
1,2,3-Trichlorobenzene	ND		ug/l	2.0	--
1,2,4-Trichlorobenzene	ND		ug/l	2.0	--
1,3,5-Trimethylbenzene	ND		ug/l	2.0	--
1,2,4-Trimethylbenzene	ND		ug/l	2.0	--
Ethyl ether	ND		ug/l	2.0	--
Isopropyl Ether	ND		ug/l	2.0	--
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.0	--
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0	--
1,4-Dioxane	ND		ug/l	250	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	96		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	94		70-130
Dibromofluoromethane	94		70-130

Project Name: EASTHAM LANDFILL
Project Number: 2015-055

Lab Number: L1706325
Report Date: 03/07/17

Method Blank Analysis
Batch Quality Control

Analytical Method: 97,8260C
Analytical Date: 03/07/17 06:43
Analyst: MM

Parameter	Result	Qualifier	Units	RL	MDL
MCP Volatile Organics - Westborough Lab for sample(s): 02 Batch: WG983461-5					
Methylene chloride	ND		ug/l	2.0	--
1,1-Dichloroethane	ND		ug/l	1.0	--
Chloroform	ND		ug/l	1.0	--
Carbon tetrachloride	ND		ug/l	1.0	--
1,2-Dichloropropane	ND		ug/l	1.0	--
Dibromochloromethane	ND		ug/l	1.0	--
1,1,2-Trichloroethane	ND		ug/l	1.0	--
Tetrachloroethene	ND		ug/l	1.0	--
Chlorobenzene	ND		ug/l	1.0	--
Trichlorofluoromethane	ND		ug/l	2.0	--
1,2-Dichloroethane	ND		ug/l	1.0	--
1,1,1-Trichloroethane	ND		ug/l	1.0	--
Bromodichloromethane	ND		ug/l	1.0	--
trans-1,3-Dichloropropene	ND		ug/l	0.50	--
cis-1,3-Dichloropropene	ND		ug/l	0.50	--
1,3-Dichloropropene, Total	ND		ug/l	0.50	--
1,1-Dichloropropene	ND		ug/l	2.0	--
Bromoform	ND		ug/l	2.0	--
1,1,2,2-Tetrachloroethane	ND		ug/l	1.0	--
Benzene	ND		ug/l	0.50	--
Toluene	ND		ug/l	1.0	--
Ethylbenzene	ND		ug/l	1.0	--
Chloromethane	ND		ug/l	2.0	--
Bromomethane	ND		ug/l	2.0	--
Vinyl chloride	ND		ug/l	1.0	--
Chloroethane	ND		ug/l	2.0	--
1,1-Dichloroethene	ND		ug/l	1.0	--
trans-1,2-Dichloroethene	ND		ug/l	1.0	--
Trichloroethene	ND		ug/l	1.0	--

Project Name: EASTHAM LANDFILL
Project Number: 2015-055

Lab Number: L1706325
Report Date: 03/07/17

Method Blank Analysis
Batch Quality Control

Analytical Method: 97,8260C
Analytical Date: 03/07/17 06:43
Analyst: MM

Parameter	Result	Qualifier	Units	RL	MDL
MCP Volatile Organics - Westborough Lab for sample(s): 02 Batch: WG983461-5					
1,2-Dichlorobenzene	ND		ug/l	1.0	--
1,3-Dichlorobenzene	ND		ug/l	1.0	--
1,4-Dichlorobenzene	ND		ug/l	1.0	--
Methyl tert butyl ether	ND		ug/l	2.0	--
p/m-Xylene	ND		ug/l	2.0	--
o-Xylene	ND		ug/l	1.0	--
Xylene (Total)	ND		ug/l	1.0	--
cis-1,2-Dichloroethene	ND		ug/l	1.0	--
1,2-Dichloroethene (total)	ND		ug/l	1.0	--
Dibromomethane	ND		ug/l	2.0	--
1,2,3-Trichloropropane	ND		ug/l	2.0	--
Styrene	ND		ug/l	1.0	--
Dichlorodifluoromethane	ND		ug/l	2.0	--
Acetone	ND		ug/l	5.0	--
Carbon disulfide	ND		ug/l	2.0	--
2-Butanone	ND		ug/l	5.0	--
4-Methyl-2-pentanone	ND		ug/l	5.0	--
2-Hexanone	ND		ug/l	5.0	--
Bromochloromethane	ND		ug/l	2.0	--
Tetrahydrofuran	ND		ug/l	2.0	--
2,2-Dichloropropane	ND		ug/l	2.0	--
1,2-Dibromoethane	ND		ug/l	2.0	--
1,3-Dichloropropane	ND		ug/l	2.0	--
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	--
Bromobenzene	ND		ug/l	2.0	--
n-Butylbenzene	ND		ug/l	2.0	--
sec-Butylbenzene	ND		ug/l	2.0	--
tert-Butylbenzene	ND		ug/l	2.0	--
o-Chlorotoluene	ND		ug/l	2.0	--

Project Name: EASTHAM LANDFILL
Project Number: 2015-055

Lab Number: L1706325
Report Date: 03/07/17

Method Blank Analysis
Batch Quality Control

Analytical Method: 97,8260C
Analytical Date: 03/07/17 06:43
Analyst: MM

Parameter	Result	Qualifier	Units	RL	MDL
MCP Volatile Organics - Westborough Lab for sample(s): 02 Batch: WG983461-5					
p-Chlorotoluene	ND		ug/l	2.0	--
1,2-Dibromo-3-chloropropane	ND		ug/l	2.0	--
Hexachlorobutadiene	ND		ug/l	0.60	--
Isopropylbenzene	ND		ug/l	2.0	--
p-Isopropyltoluene	ND		ug/l	2.0	--
Naphthalene	ND		ug/l	2.0	--
n-Propylbenzene	ND		ug/l	2.0	--
1,2,3-Trichlorobenzene	ND		ug/l	2.0	--
1,2,4-Trichlorobenzene	ND		ug/l	2.0	--
1,3,5-Trimethylbenzene	ND		ug/l	2.0	--
1,2,4-Trimethylbenzene	ND		ug/l	2.0	--
Ethyl ether	ND		ug/l	2.0	--
Isopropyl Ether	ND		ug/l	2.0	--
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.0	--
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0	--
1,4-Dioxane	ND		ug/l	250	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	89		70-130
Toluene-d8	91		70-130
4-Bromofluorobenzene	88		70-130
Dibromofluoromethane	101		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: EASTHAM LANDFILL

Lab Number: L1706325

Project Number: 2015-055

Report Date: 03/07/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 01,03 Batch: WG983125-3 WG983125-4								
Methylene chloride	100		100		70-130	0		20
1,1-Dichloroethane	100		110		70-130	10		20
Chloroform	99		96		70-130	3		20
Carbon tetrachloride	90		90		70-130	0		20
1,2-Dichloropropane	100		100		70-130	0		20
Dibromochloromethane	100		96		70-130	4		20
1,1,2-Trichloroethane	110		100		70-130	10		20
Tetrachloroethene	110		100		70-130	10		20
Chlorobenzene	110		100		70-130	10		20
Trichlorofluoromethane	97		94		70-130	3		20
1,2-Dichloroethane	100		100		70-130	0		20
1,1,1-Trichloroethane	95		95		70-130	0		20
Bromodichloromethane	99		98		70-130	1		20
trans-1,3-Dichloropropene	110		100		70-130	10		20
cis-1,3-Dichloropropene	99		99		70-130	0		20
1,1-Dichloropropene	97		99		70-130	2		20
Bromoform	98		100		70-130	2		20
1,1,2,2-Tetrachloroethane	110		110		70-130	0		20
Benzene	100		100		70-130	0		20
Toluene	110		100		70-130	10		20
Ethylbenzene	99		94		70-130	5		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: EASTHAM LANDFILL

Project Number: 2015-055

Lab Number: L1706325

Report Date: 03/07/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 01,03 Batch: WG983125-3 WG983125-4								
Chloromethane	100		100		70-130	0		20
Bromomethane	110		110		70-130	0		20
Vinyl chloride	100		100		70-130	0		20
Chloroethane	110		120		70-130	9		20
1,1-Dichloroethene	100		100		70-130	0		20
trans-1,2-Dichloroethene	100		100		70-130	0		20
Trichloroethene	98		94		70-130	4		20
1,2-Dichlorobenzene	100		98		70-130	2		20
1,3-Dichlorobenzene	98		99		70-130	1		20
1,4-Dichlorobenzene	99		99		70-130	0		20
Methyl tert butyl ether	98		98		70-130	0		20
p/m-Xylene	105		100		70-130	5		20
o-Xylene	95		95		70-130	0		20
cis-1,2-Dichloroethene	99		97		70-130	2		20
Dibromomethane	98		99		70-130	1		20
1,2,3-Trichloropropane	110		100		70-130	10		20
Styrene	90		80		70-130	12		20
Dichlorodifluoromethane	88		88		70-130	0		20
Acetone	94		100		70-130	6		20
Carbon disulfide	100		100		70-130	0		20
2-Butanone	100		100		70-130	0		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: EASTHAM LANDFILL

Project Number: 2015-055

Lab Number: L1706325

Report Date: 03/07/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 01,03 Batch: WG983125-3 WG983125-4								
4-Methyl-2-pentanone	96		94		70-130	2		20
2-Hexanone	91		82		70-130	10		20
Bromochloromethane	100		100		70-130	0		20
Tetrahydrofuran	97		100		70-130	3		20
2,2-Dichloropropane	100		99		70-130	1		20
1,2-Dibromoethane	110		100		70-130	10		20
1,3-Dichloropropane	110		100		70-130	10		20
1,1,1,2-Tetrachloroethane	100		97		70-130	3		20
Bromobenzene	100		98		70-130	2		20
n-Butylbenzene	120		96		70-130	22	Q	20
sec-Butylbenzene	110		110		70-130	0		20
tert-Butylbenzene	110		100		70-130	10		20
o-Chlorotoluene	96		95		70-130	1		20
p-Chlorotoluene	95		97		70-130	2		20
1,2-Dibromo-3-chloropropane	98		98		70-130	0		20
Hexachlorobutadiene	110		99		70-130	11		20
Isopropylbenzene	100		100		70-130	0		20
p-Isopropyltoluene	110		100		70-130	10		20
Naphthalene	110		110		70-130	0		20
n-Propylbenzene	100		100		70-130	0		20
1,2,3-Trichlorobenzene	110		110		70-130	0		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: EASTHAM LANDFILL

Lab Number: L1706325

Project Number: 2015-055

Report Date: 03/07/17

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
MCP Volatile Organics - Westborough Lab Associated sample(s): 01,03 Batch: WG983125-3 WG983125-4								
1,2,4-Trichlorobenzene	100		100		70-130	0		20
1,3,5-Trimethylbenzene	98		91		70-130	7		20
1,2,4-Trimethylbenzene	100		99		70-130	1		20
Ethyl ether	100		100		70-130	0		20
Isopropyl Ether	100		100		70-130	0		20
Ethyl-Tert-Butyl-Ether	98		99		70-130	1		20
Tertiary-Amyl Methyl Ether	99		96		70-130	3		20
1,4-Dioxane	96		94		70-130	2		20

Surrogate	LCS		LCSD		Acceptance Criteria
	%Recovery	Qual	%Recovery	Qual	
1,2-Dichloroethane-d4	96		98		70-130
Toluene-d8	103		101		70-130
4-Bromofluorobenzene	101		103		70-130
Dibromofluoromethane	99		100		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: EASTHAM LANDFILL

Lab Number: L1706325

Project Number: 2015-055

Report Date: 03/07/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 02 Batch: WG983461-3 WG983461-4								
Methylene chloride	110		100		70-130	10		20
1,1-Dichloroethane	110		110		70-130	0		20
Chloroform	110		110		70-130	0		20
Carbon tetrachloride	110		110		70-130	0		20
1,2-Dichloropropane	110		110		70-130	0		20
Dibromochloromethane	100		100		70-130	0		20
1,1,2-Trichloroethane	100		100		70-130	0		20
Tetrachloroethene	110		110		70-130	0		20
Chlorobenzene	100		100		70-130	0		20
Trichlorofluoromethane	120		120		70-130	0		20
1,2-Dichloroethane	110		100		70-130	10		20
1,1,1-Trichloroethane	120		110		70-130	9		20
Bromodichloromethane	110		110		70-130	0		20
trans-1,3-Dichloropropene	91		92		70-130	1		20
cis-1,3-Dichloropropene	100		100		70-130	0		20
1,1-Dichloropropene	110		110		70-130	0		20
Bromoform	84		86		70-130	2		20
1,1,2,2-Tetrachloroethane	91		92		70-130	1		20
Benzene	110		110		70-130	0		20
Toluene	100		100		70-130	0		20
Ethylbenzene	97		97		70-130	0		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: EASTHAM LANDFILL

Lab Number: L1706325

Project Number: 2015-055

Report Date: 03/07/17

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
MCP Volatile Organics - Westborough Lab Associated sample(s): 02 Batch: WG983461-3 WG983461-4								
Chloromethane	95		96		70-130	1		20
Bromomethane	98		92		70-130	6		20
Vinyl chloride	120		110		70-130	9		20
Chloroethane	120		120		70-130	0		20
1,1-Dichloroethene	120		120		70-130	0		20
trans-1,2-Dichloroethene	120		110		70-130	9		20
Trichloroethene	110		110		70-130	0		20
1,2-Dichlorobenzene	94		98		70-130	4		20
1,3-Dichlorobenzene	93		96		70-130	3		20
1,4-Dichlorobenzene	94		96		70-130	2		20
Methyl tert butyl ether	100		100		70-130	0		20
p/m-Xylene	95		100		70-130	5		20
o-Xylene	100		100		70-130	0		20
cis-1,2-Dichloroethene	110		110		70-130	0		20
Dibromomethane	110		110		70-130	0		20
1,2,3-Trichloropropane	87		87		70-130	0		20
Styrene	100		100		70-130	0		20
Dichlorodifluoromethane	100		100		70-130	0		20
Acetone	98		95		70-130	3		20
Carbon disulfide	110		110		70-130	0		20
2-Butanone	97		96		70-130	1		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: EASTHAM LANDFILL

Lab Number: L1706325

Project Number: 2015-055

Report Date: 03/07/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 02 Batch: WG983461-3 WG983461-4								
4-Methyl-2-pentanone	89		88		70-130	1		20
2-Hexanone	86		86		70-130	0		20
Bromochloromethane	120		120		70-130	0		20
Tetrahydrofuran	93		96		70-130	3		20
2,2-Dichloropropane	100		100		70-130	0		20
1,2-Dibromoethane	100		100		70-130	0		20
1,3-Dichloropropane	98		100		70-130	2		20
1,1,1,2-Tetrachloroethane	110		110		70-130	0		20
Bromobenzene	89		92		70-130	3		20
n-Butylbenzene	100		100		70-130	0		20
sec-Butylbenzene	93		96		70-130	3		20
tert-Butylbenzene	92		95		70-130	3		20
o-Chlorotoluene	88		90		70-130	2		20
p-Chlorotoluene	87		89		70-130	2		20
1,2-Dibromo-3-chloropropane	92		94		70-130	2		20
Hexachlorobutadiene	97		100		70-130	3		20
Isopropylbenzene	89		91		70-130	2		20
p-Isopropyltoluene	97		100		70-130	3		20
Naphthalene	99		100		70-130	1		20
n-Propylbenzene	89		91		70-130	2		20
1,2,3-Trichlorobenzene	110		110		70-130	0		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: EASTHAM LANDFILL

Project Number: 2015-055

Lab Number: L1706325

Report Date: 03/07/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 02 Batch: WG983461-3 WG983461-4								
1,2,4-Trichlorobenzene	100		110		70-130	10		20
1,3,5-Trimethylbenzene	94		97		70-130	3		20
1,2,4-Trimethylbenzene	97		99		70-130	2		20
Ethyl ether	120		110		70-130	9		20
Isopropyl Ether	100		100		70-130	0		20
Ethyl-Tert-Butyl-Ether	100		110		70-130	10		20
Tertiary-Amyl Methyl Ether	110		110		70-130	0		20
1,4-Dioxane	94		92		70-130	2		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	89		87		70-130
Toluene-d8	93		92		70-130
4-Bromofluorobenzene	91		92		70-130
Dibromofluoromethane	103		101		70-130

SEMIVOLATILES

Project Name: EASTHAM LANDFILL
Project Number: 2015-055

Lab Number: L1706325
Report Date: 03/07/17

SAMPLE RESULTS

Lab ID: L1706325-01
 Client ID: MW-3I
 Sample Location: EASTHAM, MA
 Matrix: Water
 Analytical Method: 1,8270D-SIM
 Analytical Date: 03/04/17 02:00
 Analyst: WR

Date Collected: 03/01/17 11:30
 Date Received: 03/01/17
 Field Prep: Not Specified
 Extraction Method: EPA 3510C
 Extraction Date: 03/02/17 21:53

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	ND		ug/l	0.144	--	1
Surrogate	% Recovery	Qualifier	Acceptance Criteria			
1,4-Dioxane-d8	25		15-110			

Project Name: EASTHAM LANDFILL
Project Number: 2015-055

Lab Number: L1706325
Report Date: 03/07/17

SAMPLE RESULTS

Lab ID: L1706325-02
 Client ID: MW-3D
 Sample Location: EASTHAM, MA
 Matrix: Water
 Analytical Method: 1,8270D-SIM
 Analytical Date: 03/04/17 02:46
 Analyst: WR

Date Collected: 03/01/17 11:30
 Date Received: 03/01/17
 Field Prep: Not Specified
 Extraction Method: EPA 3510C
 Extraction Date: 03/02/17 21:53

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	6.94		ug/l	0.147	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	23		15-110

Project Name: EASTHAM LANDFILL

Lab Number: L1706325

Project Number: 2015-055

Report Date: 03/07/17

**Method Blank Analysis
Batch Quality Control**

Analytical Method: 1,8270D-SIM
 Analytical Date: 03/03/17 23:43
 Analyst: WR

Extraction Method: EPA 3510C
 Extraction Date: 03/02/17 21:53

Parameter	Result	Qualifier	Units	RL	MDL
1,4 Dioxane by 8270D-SIM - Mansfield Lab for sample(s): 01-02 Batch: WG982474-1					
1,4-Dioxane	ND		ug/l	0.150	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	32		15-110

Lab Control Sample Analysis Batch Quality Control

Project Name: EASTHAM LANDFILL
Project Number: 2015-055

Lab Number: L1706325
Report Date: 03/07/17

Parameter	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>%Recovery</i> Limits	<i>RPD</i>	<i>Qual</i>	<i>RPD</i> Limits
1,4 Dioxane by 8270D-SIM - Mansfield Lab Associated sample(s): 01-02 Batch: WG982474-2 WG982474-3								
1,4-Dioxane	124		126		40-140	2		30

<i>Surrogate</i>	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>Acceptance</i> <i>Criteria</i>
1,4-Dioxane-d8	34		35		15-110

METALS

Project Name: EASTHAM LANDFILL
Project Number: 2015-055

Lab Number: L1706325
Report Date: 03/07/17

SAMPLE RESULTS

Lab ID: L1706325-01
 Client ID: MW-3I
 Sample Location: EASTHAM, MA
 Matrix: Water

Date Collected: 03/01/17 11:30
 Date Received: 03/01/17
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
MCP Dissolved Metals - Mansfield Lab											
Arsenic, Dissolved	0.048		mg/l	0.005	--	1	03/03/17 13:20	03/06/17 17:09	EPA 3005A	97,6010C	MC
Barium, Dissolved	0.011		mg/l	0.010	--	1	03/03/17 13:20	03/06/17 17:09	EPA 3005A	97,6010C	MC
Cadmium, Dissolved	ND		mg/l	0.004	--	1	03/03/17 13:20	03/06/17 17:09	EPA 3005A	97,6010C	MC
Chromium, Dissolved	ND		mg/l	0.010	--	1	03/03/17 13:20	03/06/17 17:09	EPA 3005A	97,6010C	MC
Copper, Dissolved	ND		mg/l	0.010	--	1	03/03/17 13:20	03/06/17 17:09	EPA 3005A	97,6010C	MC
Iron, Dissolved	64		mg/l	0.05	--	1	03/03/17 13:20	03/06/17 17:09	EPA 3005A	97,6010C	MC
Lead, Dissolved	ND		mg/l	0.010	--	1	03/03/17 13:20	03/06/17 17:09	EPA 3005A	97,6010C	MC
Mercury, Dissolved	ND		mg/l	0.0002	--	1	03/03/17 10:10	03/03/17 18:43	EPA 7470A	97,7470A	EA
Selenium, Dissolved	ND		mg/l	0.010	--	1	03/03/17 13:20	03/06/17 17:09	EPA 3005A	97,6010C	MC
Silver, Dissolved	ND		mg/l	0.007	--	1	03/03/17 13:20	03/06/17 17:09	EPA 3005A	97,6010C	MC
Zinc, Dissolved	ND		mg/l	0.050	--	1	03/03/17 13:20	03/06/17 17:09	EPA 3005A	97,6010C	MC



Project Name: EASTHAM LANDFILL
Project Number: 2015-055

Lab Number: L1706325
Report Date: 03/07/17

SAMPLE RESULTS

Lab ID: L1706325-02
 Client ID: MW-3D
 Sample Location: EASTHAM, MA
 Matrix: Water

Date Collected: 03/01/17 11:30
 Date Received: 03/01/17
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
MCP Dissolved Metals - Mansfield Lab											
Arsenic, Dissolved	0.079		mg/l	0.005	--	1	03/03/17 13:20	03/06/17 17:13	EPA 3005A	97,6010C	MC
Barium, Dissolved	0.071		mg/l	0.010	--	1	03/03/17 13:20	03/06/17 17:13	EPA 3005A	97,6010C	MC
Cadmium, Dissolved	ND		mg/l	0.004	--	1	03/03/17 13:20	03/06/17 17:13	EPA 3005A	97,6010C	MC
Chromium, Dissolved	ND		mg/l	0.01	--	1	03/03/17 13:20	03/06/17 17:13	EPA 3005A	97,6010C	MC
Copper, Dissolved	ND		mg/l	0.010	--	1	03/03/17 13:20	03/06/17 17:13	EPA 3005A	97,6010C	MC
Iron, Dissolved	35		mg/l	0.05	--	1	03/03/17 13:20	03/06/17 17:13	EPA 3005A	97,6010C	MC
Lead, Dissolved	ND		mg/l	0.010	--	1	03/03/17 13:20	03/06/17 17:13	EPA 3005A	97,6010C	MC
Mercury, Dissolved	ND		mg/l	0.0002	--	1	03/03/17 10:10	03/03/17 18:45	EPA 7470A	97,7470A	EA
Selenium, Dissolved	ND		mg/l	0.010	--	1	03/03/17 13:20	03/06/17 17:13	EPA 3005A	97,6010C	MC
Silver, Dissolved	ND		mg/l	0.007	--	1	03/03/17 13:20	03/06/17 17:13	EPA 3005A	97,6010C	MC
Zinc, Dissolved	ND		mg/l	0.050	--	1	03/03/17 13:20	03/06/17 17:13	EPA 3005A	97,6010C	MC



Project Name: EASTHAM LANDFILL
Project Number: 2015-055

Lab Number: L1706325
Report Date: 03/07/17

Method Blank Analysis Batch Quality Control

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
MCP Dissolved Metals - Mansfield Lab for sample(s): 01-02 Batch: WG982608-1									
Mercury, Dissolved	ND	mg/l	0.0002	--	1	03/03/17 10:10	03/03/17 18:38	97,7470A	EA

Prep Information

Digestion Method: EPA 7470A

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
MCP Dissolved Metals - Mansfield Lab for sample(s): 01-02 Batch: WG982638-1									
Arsenic, Dissolved	ND	mg/l	0.005	--	1	03/03/17 13:20	03/06/17 16:11	97,6010C	PS
Barium, Dissolved	ND	mg/l	0.010	--	1	03/03/17 13:20	03/06/17 16:11	97,6010C	PS
Cadmium, Dissolved	ND	mg/l	0.004	--	1	03/03/17 13:20	03/06/17 16:11	97,6010C	PS
Chromium, Dissolved	ND	mg/l	0.01	--	1	03/03/17 13:20	03/06/17 16:11	97,6010C	PS
Copper, Dissolved	ND	mg/l	0.010	--	1	03/03/17 13:20	03/06/17 16:11	97,6010C	PS
Iron, Dissolved	ND	mg/l	0.05	--	1	03/03/17 13:20	03/06/17 16:11	97,6010C	PS
Lead, Dissolved	ND	mg/l	0.010	--	1	03/03/17 13:20	03/06/17 16:11	97,6010C	PS
Selenium, Dissolved	ND	mg/l	0.010	--	1	03/03/17 13:20	03/06/17 16:11	97,6010C	PS
Silver, Dissolved	ND	mg/l	0.007	--	1	03/03/17 13:20	03/06/17 16:11	97,6010C	PS
Zinc, Dissolved	ND	mg/l	0.050	--	1	03/03/17 13:20	03/06/17 16:11	97,6010C	PS

Prep Information

Digestion Method: EPA 3005A

Lab Control Sample Analysis

Batch Quality Control

Project Name: EASTHAM LANDFILL

Project Number: 2015-055

Lab Number: L1706325

Report Date: 03/07/17

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
MCP Dissolved Metals - Mansfield Lab Associated sample(s): 01-02 Batch: WG982608-2 WG982608-3								
Mercury, Dissolved	96		102		80-120	6		20
MCP Dissolved Metals - Mansfield Lab Associated sample(s): 01-02 Batch: WG982638-2 WG982638-3								
Arsenic, Dissolved	110		108		80-120	2		20
Barium, Dissolved	102		104		80-120	2		20
Cadmium, Dissolved	104		105		80-120	1		20
Chromium, Dissolved	100		100		80-120	0		20
Copper, Dissolved	100		102		80-120	2		20
Iron, Dissolved	110		110		80-120	0		20
Lead, Dissolved	103		104		80-120	1		20
Selenium, Dissolved	112		113		80-120	1		20
Silver, Dissolved	103		105		80-120	2		20
Zinc, Dissolved	101		102		80-120	1		20

INORGANICS & MISCELLANEOUS

Project Name: EASTHAM LANDFILL
Project Number: 2015-055

Lab Number: L1706325
Report Date: 03/07/17

SAMPLE RESULTS

Lab ID: L1706325-01
Client ID: MW-3I
Sample Location: EASTHAM, MA
Matrix: Water

Date Collected: 03/01/17 11:30
Date Received: 03/01/17
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
MCP General Chemistry - Westborough Lab										
Cyanide, Total	ND		mg/l	0.005	--	1	03/02/17 10:35	03/02/17 13:41	97,9014	JO
General Chemistry - Westborough Lab										
Alkalinity, Total	157.		mg CaCO3/L	2.00	NA	1	-	03/02/17 09:18	121,2320B	BR
Solids, Total Dissolved	140		mg/l	20	--	2	-	03/02/17 11:40	121,2540C	DW
Chloride	12.		mg/l	1.0	--	1	-	03/04/17 16:58	121,4500CL-E	MR
pH (H)	6.3		SU	-	NA	1	-	03/01/17 20:29	121,4500H+-B	AS
Nitrogen, Nitrate	ND		mg/l	0.100	--	1	-	03/02/17 21:53	121,4500NO3-F	MR
Sulfate	33.		mg/l	10	--	1	03/06/17 14:43	03/06/17 14:43	121,4500SO4-E	BR
Chemical Oxygen Demand	ND		mg/l	20	--	1	03/02/17 17:50	03/02/17 20:02	121,5220D	TL



Project Name: EASTHAM LANDFILL
Project Number: 2015-055

Lab Number: L1706325
Report Date: 03/07/17

SAMPLE RESULTS

Lab ID: L1706325-02
Client ID: MW-3D
Sample Location: EASTHAM, MA
Matrix: Water

Date Collected: 03/01/17 11:30
Date Received: 03/01/17
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
MCP General Chemistry - Westborough Lab										
Cyanide, Total	ND		mg/l	0.005	--	1	03/02/17 10:35	03/02/17 13:42	97,9014	JO
General Chemistry - Westborough Lab										
Alkalinity, Total	547.		mg CaCO3/L	2.00	NA	1	-	03/02/17 09:18	121,2320B	BR
Solids, Total Dissolved	460		mg/l	20	--	2	-	03/02/17 11:40	121,2540C	DW
Chloride	58.		mg/l	1.0	--	1	-	03/04/17 16:59	121,4500CL-E	MR
pH (H)	6.6		SU	-	NA	1	-	03/01/17 20:29	121,4500H+-B	AS
Nitrogen, Nitrate	ND		mg/l	0.100	--	1	-	03/02/17 21:54	121,4500NO3-F	MR
Sulfate	47.		mg/l	20	--	2	03/06/17 14:43	03/06/17 14:43	121,4500SO4-E	BR
Chemical Oxygen Demand	33.		mg/l	20	--	1	03/02/17 17:50	03/02/17 20:02	121,5220D	TL



Project Name: EASTHAM LANDFILL
Project Number: 2015-055

Lab Number: L1706325
Report Date: 03/07/17

**Method Blank Analysis
Batch Quality Control**

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab for sample(s): 01-02 Batch: WG982175-1									
Solids, Total Dissolved	ND	mg/l	10	--	1	-	03/02/17 11:40	121,2540C	DW
General Chemistry - Westborough Lab for sample(s): 01-02 Batch: WG982225-1									
Alkalinity, Total	ND	mg CaCO3/L	2.00	NA	1	-	03/02/17 09:18	121,2320B	BR
MCP General Chemistry - Westborough Lab for sample(s): 01-02 Batch: WG982249-1									
Cyanide, Total	ND	mg/l	0.005	--	1	03/02/17 10:35	03/02/17 13:35	97,9014	JO
General Chemistry - Westborough Lab for sample(s): 01-02 Batch: WG982395-1									
Nitrogen, Nitrate	ND	mg/l	0.100	--	1	-	03/02/17 20:20	121,4500NO3-F	MR
General Chemistry - Westborough Lab for sample(s): 01-02 Batch: WG982398-1									
Chemical Oxygen Demand	ND	mg/l	20	--	1	03/02/17 17:50	03/02/17 20:00	121,5220D	TL
General Chemistry - Westborough Lab for sample(s): 01-02 Batch: WG982815-1									
Chloride	ND	mg/l	1.0	--	1	-	03/04/17 15:10	121,4500CL-E	MR
General Chemistry - Westborough Lab for sample(s): 01-02 Batch: WG983219-1									
Sulfate	ND	mg/l	10	--	1	03/06/17 14:43	03/06/17 14:43	121,4500SO4-E	BR

Lab Control Sample Analysis

Batch Quality Control

Project Name: EASTHAM LANDFILL

Project Number: 2015-055

Lab Number: L1706325

Report Date: 03/07/17

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
General Chemistry - Westborough Lab Associated sample(s): 01-02 Batch: WG982090-1								
pH	100		-		99-101	-		5
General Chemistry - Westborough Lab Associated sample(s): 01-02 Batch: WG982175-2								
Solids, Total Dissolved	94		-		80-120	-		
General Chemistry - Westborough Lab Associated sample(s): 01-02 Batch: WG982225-2								
Alkalinity, Total	102		-		90-110	-		10
MCP General Chemistry - Westborough Lab Associated sample(s): 01-02 Batch: WG982249-2 WG982249-3								
Cyanide, Total	106		104		80-120	2		20
General Chemistry - Westborough Lab Associated sample(s): 01-02 Batch: WG982395-2								
Nitrogen, Nitrate	98		-		90-110	-		
General Chemistry - Westborough Lab Associated sample(s): 01-02 Batch: WG982398-2								
Chemical Oxygen Demand	102		-		90-110	-		
General Chemistry - Westborough Lab Associated sample(s): 01-02 Batch: WG982815-2								
Chloride	97		-		90-110	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: EASTHAM LANDFILL

Lab Number: L1706325

Project Number: 2015-055

Report Date: 03/07/17

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-02 Batch: WG983219-2					
Sulfate	90	-	84-121	-	

Matrix Spike Analysis
Batch Quality Control

Project Name: EASTHAM LANDFILL

Lab Number: L1706325

Project Number: 2015-055

Report Date: 03/07/17

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Qual	MSD Found	MSD %Recovery	MSD Qual	Recovery Limits	RPD	RPD Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG982398-3 QC Sample: L1706325-02 Client ID: MW-3D												
Chemical Oxygen Demand	33	238	300	111		-	-		84-120	-		12

Lab Duplicate Analysis

Batch Quality Control

Project Name: EASTHAM LANDFILL

Project Number: 2015-055

Lab Number: L1706325

Report Date: 03/07/17

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG982090-2 QC Sample: L1706325-02 Client ID: MW-3D						
pH (H)	6.6	6.6	SU	0		5
General Chemistry - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG982398-4 QC Sample: L1706325-02 Client ID: MW-3D						
Chemical Oxygen Demand	33	42	mg/l	24	Q	12

Project Name: EASTHAM LANDFILL
Project Number: 2015-055

Lab Number: L1706325
Report Date: 03/07/17

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information Custody Seal

Cooler

A Absent

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1706325-01A	Vial HCl preserved	A	N/A	2.5	Y	Absent	MCP-8260-10(14)
L1706325-01B	Vial HCl preserved	A	N/A	2.5	Y	Absent	MCP-8260-10(14)
L1706325-01C	Vial HCl preserved	A	N/A	2.5	Y	Absent	MCP-8260-10(14)
L1706325-01D	Amber 500ml unpreserved	A	7	2.5	Y	Absent	A2-14-DIOXANESIM-PPB(7)
L1706325-01E	Amber 500ml unpreserved	A	7	2.5	Y	Absent	A2-14-DIOXANESIM-PPB(7)
L1706325-01F	Plastic 250ml HNO3 preserved	A	<2	2.5	Y	Absent	MCP-CD-6010S-10(180),MCP-FE-6010S-10(180),MCP-7470S-10(28),MCP-AG-6010S-10(180),MCP-ZN-6010S-10(180),MCP-AS-6010S-10(180),MCP-CR-6010S-10(180),MCP-BA-6010S-10(180),MCP-PB-6010S-10(180),MCP-CU-6010S-10(180),MCP-SE-6010S-10(180)
L1706325-01G	Plastic 500ml unpreserved	A	7	2.5	Y	Absent	SO4-4500(28),CL-4500(28),NO3-4500(2),PH-4500(.01),TDS-2540(7)
L1706325-01H	Plastic 250ml unpreserved w/No H	A	N/A	2.5	Y	Absent	ALK-T-2320(14)
L1706325-01I	Plastic 120ml H2SO4 preserved	A	<2	2.5	Y	Absent	COD-5220(28)
L1706325-01J	Plastic 250ml NaOH preserved	A	>12	2.5	Y	Absent	MCP-TCN9014-10(14)
L1706325-02A	Vial HCl preserved	A	N/A	2.5	Y	Absent	MCP-8260-10(14)
L1706325-02B	Vial HCl preserved	A	N/A	2.5	Y	Absent	MCP-8260-10(14)
L1706325-02C	Vial HCl preserved	A	N/A	2.5	Y	Absent	MCP-8260-10(14)
L1706325-02D	Amber 500ml unpreserved	A	7	2.5	Y	Absent	A2-14-DIOXANESIM-PPB(7)
L1706325-02E	Amber 500ml unpreserved	A	7	2.5	Y	Absent	A2-14-DIOXANESIM-PPB(7)
L1706325-02F	Plastic 250ml HNO3 preserved	A	<2	2.5	Y	Absent	MCP-CD-6010S-10(180),MCP-FE-6010S-10(180),MCP-7470S-10(28),MCP-AG-6010S-10(180),MCP-ZN-6010S-10(180),MCP-AS-6010S-10(180),MCP-CR-6010S-10(180),MCP-BA-6010S-10(180),MCP-PB-6010S-10(180),MCP-CU-6010S-10(180),MCP-SE-6010S-10(180)

*Values in parentheses indicate holding time in days

Project Name: EASTHAM LANDFILL**Project Number:** 2015-055**Lab Number:** L1706325**Report Date:** 03/07/17**Container Information**

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1706325-02G	Plastic 500ml unpreserved	A	7	2.5	Y	Absent	SO4-4500(28),CL-4500(28),NO3-4500(2),PH-4500(.01),TDS-2540(7)
L1706325-02H	Plastic 250ml unpreserved w/No H	A	N/A	2.5	Y	Absent	ALK-T-2320(14)
L1706325-02I	Plastic 120ml H2SO4 preserved	A	<2	2.5	Y	Absent	COD-5220(28)
L1706325-02J	Plastic 250ml NaOH preserved	A	>12	2.5	Y	Absent	MCP-TCN9014-10(14)
L1706325-03A	Vial HCl preserved	A	N/A	2.5	Y	Absent	MCP-8260-10(14)
L1706325-03B	Vial HCl preserved	A	N/A	2.5	Y	Absent	MCP-8260-10(14)

*Values in parentheses indicate holding time in days

Project Name: EASTHAM LANDFILL
Project Number: 2015-055

Lab Number: L1706325
Report Date: 03/07/17

GLOSSARY

Acronyms

EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Footnotes

- 1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Data Qualifiers

- A** - Spectra identified as "Aldol Condensation Product".
- B** - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the

Report Format: Data Usability Report



Project Name: EASTHAM LANDFILL
Project Number: 2015-055

Lab Number: L1706325
Report Date: 03/07/17

Data Qualifiers

- reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
 - D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
 - E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
 - G** - The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated.
 - H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
 - I** - The lower value for the two columns has been reported due to obvious interference.
 - M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
 - NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
 - P** - The RPD between the results for the two columns exceeds the method-specified criteria.
 - Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
 - R** - Analytical results are from sample re-analysis.
 - RE** - Analytical results are from sample re-extraction.
 - S** - Analytical results are from modified screening analysis.
 - J** - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
 - ND** - Not detected at the reporting limit (RL) for the sample.

Project Name: EASTHAM LANDFILL
Project Number: 2015-055

Lab Number: L1706325
Report Date: 03/07/17

REFERENCES

- 1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IV, 2007.
- 97 EPA Test Methods (SW-846) with QC Requirements & Performance Standards for the Analysis of EPA SW-846 Methods under the Massachusetts Contingency Plan, WSC-CAM-IIA, IIB, IIIA, IIIB, IIIC, IIID, VA, VB, VC, VIA, VIB, VIIIA and VIIIB, July 2010.
- 121 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WEF. Standard Methods Online.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility

EPA 624: m/p-xylene, o-xylene

EPA 8260C: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), Methyl methacrylate, 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.

EPA 8270D: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.

EPA 300: DW: Bromide

EPA 6860: NPW and SCM: Perchlorate

EPA 9010: NPW and SCM: Amenable Cyanide Distillation

EPA 9012B: NPW: Total Cyanide

EPA 9050A: NPW: Specific Conductance

SM3500: NPW: Ferrous Iron

SM4500: NPW: Amenable Cyanide, Dissolved Oxygen; SCM: Total Phosphorus, TKN, NO₂, NO₃.

SM5310C: DW: Dissolved Organic Carbon

Mansfield Facility

SM 2540D: TSS

EPA 3005A NPW

EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.

EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

Biological Tissue Matrix: EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:

Drinking Water

EPA 300.0: Nitrate-N, Fluoride, Sulfate; **EPA 353.2:** Nitrate-N, Nitrite-N; **SM4500NO3-F:** Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500CI-D, SM2320B, SM2540C, SM4500H-B**

EPA 332: Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.

Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT, SM9222D.**

Non-Potable Water

SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH, EPA 350.1: Ammonia-N, **LACHAT 10-107-06-1-B:** Ammonia-N, **SM4500NO3-F, EPA 353.2:** Nitrate-N, **EPA 351.1, SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D.**

EPA 624: Volatile Halocarbons & Aromatics,

EPA 608: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs

EPA 625: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045:** PCB-Oil.

Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9221E.**

Mansfield Facility:

Drinking Water

EPA 200.7: Ba, Be, Cd, Cr, Cu, Ni, Na, Ca. **EPA 200.8:** Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Ni, Se, TL. **EPA 245.1 Hg.**

Non-Potable Water

EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.

EPA 200.8: Al, Sb, As, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn.

EPA 245.1 Hg.

SM2340B

For a complete listing of analytes and methods, please contact your Alpha Project Manager.



CHAIN OF CUSTODY

PAGE 1 OF 1

Project Information

Project Name: Eastham Landfill

Project Location: Eastham MA

Project #: 2015-038 055

Project Manager: Lisa Flynn

ALPHA Quote #:

Turn-Around Time

Standard Rush (ONLY IF PRE-APPROVED)

Due Date: Time:

Westborough, MA Mansfield, MA
 TEL: 508-898-9220 TEL: 508-822-9300
 FAX: 508-898-9193 FAX: 508-822-3288

Client Information

Client: Environmental Strategies & Managemen

Address: 273 West Main Street

Norton, MA 02703

Phone: 508-226-1800

Fax: 508-226-1811

Email: lflynn@esm-inc.com

These samples have been Previously analyzed by Alpha

Other Project Specific Requirements/Comments/Detection Limits:

Samples collected by BCHD - Ship coolers to Lynn Mulkeen at Barnstable County
 Results emailed to Lisa Flynn at ES&M lflynn@esm-inc.com
 Invoices to Eastham Board of Health

Date Rec'd in Lab: 3/1/17

ALPHA Job #: 4706325

Report Information Data Deliverables

FAX EMAIL
 ADEx Add'l Deliverables

Billing Information

Same as Client info PO #:

Regulatory Requirements/Report Limits

State/Fed Program

Criteria

B8260 & 8270 & Metals - MCP

0.15 ug/l for 1,4 dioxane, GW-1

MCP PRESUMPTIVE CERTAINTY-CT REASONABLE CONFIDENCE PROTOCOLS

Yes No Are MCP Analytical Methods Required?
 Yes No Are CT RCP (Reasonable Confidence Protocols) Required?

ANALYSIS

1,4 DIOXANE BY 8270 SIM	VOCS BY 8260	Dissolved RCRA8 + Cu/Fe/Zn	TDS, SO4, Cl, NO3	Alkalinity	COD	Cyanide												
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

SAMPLE HANDLING
 Filtration
 Done
 Not Needed
 Lab to do
 Preservation
 Lab to do
 (Please specify below)

TOTAL # BOTTLES

Sample Specific Comments

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection		Sample Matrix	Sampler's Initials														Sample Specific Comments		
		Date	Time																		
06325-01	MW-3I	3/1/17	1130	GW	LKM	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	please report pH	10
02	MW-3D	3/1/17	1130	GW	LKM	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	↓	10
03	TRIPBLANK					<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
						<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
						<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
						<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
						<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
						<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		

PLEASE ANSWER QUESTIONS ABOVE!

IS YOUR PROJECT MA MCP or CT RCP?

FORM NO 01-01(1) (rev. 5-JAN-12)

Container Type	A	V	P	P	P	P	P	-	-	-	-	-	-
Preservative	A	B	C	A	A	D	E	-	-	-	-	-	-
Relinquished By:	Lisa Flynn			Date/Time	3/1/17 15:30	Received By:	Lisa Flynn			Date/Time	3/1/17 15:10		
	Lisa Flynn			Date/Time	3/1/17-1725	Received By:	Lisa Flynn			Date/Time	3/1/17 1728		

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Payment Terms.

Method Blank Summary Form 4

Client	: Environmental Strategies & Mgmt.	Lab Number	: L1706325
Project Name	: EASTHAM LANDFILL	Project Number	: 2015-055
Lab Sample ID	: WG983125-5	Lab File ID	: VJ170306A08
Instrument ID	: JACK		
Matrix	: WATER	Analysis Date	: 03/06/17 06:37

Client Sample No.	Lab Sample ID	Analysis Date
WG983125-3LCS	WG983125-3	03/06/17 04:57
WG983125-4LCSD	WG983125-4	03/06/17 05:30
TRIPBLANK	L1706325-03	03/06/17 07:10
MW-3I	L1706325-01	03/06/17 07:44

Method Blank Summary Form 4

Client	: Environmental Strategies & Mgmt.	Lab Number	: L1706325
Project Name	: EASTHAM LANDFILL	Project Number	: 2015-055
Lab Sample ID	: WG983461-5	Lab File ID	: VQ170307A06
Instrument ID	: QUIMBY		
Matrix	: WATER	Analysis Date	: 03/07/17 06:43

Client Sample No.	Lab Sample ID	Analysis Date
WG983461-3LCS	WG983461-3	03/07/17 05:10
WG983461-4LCSD	WG983461-4	03/07/17 05:41
MW-3D	L1706325-02	03/07/17 07:15

Continuing Calibration Form 7

Client	: Environmental Strategies & Mgmt.	Lab Number	: L1706325
Project Name	: EASTHAM LANDFILL	Project Number	: 2015-055
Instrument ID	: JACK	Calibration Date	: 03/06/17 04:57
Lab File ID	: VJ170306A02	Init. Calib. Date(s)	: 02/28/17 02/28/17
Sample No	: WG983125-2	Init. Calib. Times	: 07:34 11:28
Channel	:		

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
Fluorobenzene	1	1	-	0	20	86	0
Dichlorodifluoromethane	0.467	0.411	-	12	20	75	0
Chloromethane	0.428	0.429	-	-0.2	20	88	.02
Vinyl chloride	0.444	0.464	-	-4.5	20	85	0
Bromomethane	0.229	0.258	-	-12.7	20	106	0
Chloroethane	10	11.378	-	-13.8	20	87	0
Trichlorofluoromethane	0.703	0.684	-	2.7	20	80	-.02
Ethyl ether	0.18	0.181	-	-0.6	20	88	-.02
1,1-Dichloroethene	0.4	0.398	-	0.5	20	85	-.02
Carbon disulfide	1.142	1.149	-	-0.6	20	87	-.02
Methylene chloride	10	10.595	-	-6	20	90	-.02
Acetone	10	9.427	-	5.7	20	89	-.02
trans-1,2-Dichloroethene	0.424	0.44	-	-3.8	20	92	-.02
Methyl tert-butyl ether	0.91	0.894	-	1.8	20	91	0
Diisopropyl ether	1.34	1.39	-	-3.7	20	88	0
1,1-Dichloroethane	0.843	0.854	-	-1.3	20	88	-.02
Ethyl tert-butyl ether	1.072	1.056	-	1.5	20	85	0
cis-1,2-Dichloroethene	0.491	0.485	-	1.2	20	88	-.02
2,2-Dichloropropane	0.717	0.714	-	0.4	20	82	0
Bromochloromethane	0.221	0.227	-	-2.7	20	91	0
Chloroform	0.808	0.803	-	0.6	20	87	0
Carbon tetrachloride	0.658	0.594	-	9.7	20	81	0
Tetrahydrofuran	0.109	0.106	-	2.8	20	92	0
Dibromofluoromethane	0.304	0.3	-	1.3	20	86	0
1,1,1-Trichloroethane	0.735	0.699	-	4.9	20	81	-.02
2-Butanone	0.117	0.118	-	-0.9	20	95	0
1,1-Dichloropropene	0.568	0.553	-	2.6	20	82	0
Benzene	1.575	1.587	-	-0.8	20	86	0
tert-Amyl methyl ether	0.833	0.827	-	0.7	20	85	0
1,2-Dichloroethane-d4	0.326	0.314	-	3.7	20	87	-.02
1,2-Dichloroethane	0.535	0.532	-	0.6	20	88	0
Trichloroethene	0.436	0.428	-	1.8	20	85	0
Dibromomethane	0.212	0.208	-	1.9	20	86	-.02
1,2-Dichloropropane	0.395	0.413	-	-4.6	20	88	0
Bromodichloromethane	0.522	0.518	-	0.8	20	86	0
1,4-Dioxane	0.00145	0.0014*	-	3.4	20	91	0
cis-1,3-Dichloropropene	0.603	0.6	-	0.5	20	85	0
Chlorobenzene-d5	1	1	-	0	20	89	0
Toluene-d8	1.338	1.377	-	-2.9	20	87	0
Toluene	1.245	1.348	-	-8.3	20	88	0
4-Methyl-2-pentanone	0.134	0.129	-	3.7	20	82	0
Tetrachloroethene	0.646	0.69	-	-6.8	20	85	0
trans-1,3-Dichloropropene	0.807	0.857	-	-6.2	20	85	0
1,1,2-Trichloroethane	0.372	0.4	-	-7.5	20	87	0
Chlorodibromomethane	0.573	0.573	-	0	20	83	0

* Value outside of QC limits.



Continuing Calibration Form 7

Client	: Environmental Strategies & Mgmt.	Lab Number	: L1706325
Project Name	: EASTHAM LANDFILL	Project Number	: 2015-055
Instrument ID	: JACK	Calibration Date	: 03/06/17 04:57
Lab File ID	: VJ170306A02	Init. Calib. Date(s)	: 02/28/17 02/28/17
Sample No	: WG983125-2	Init. Calib. Times	: 07:34 11:28
Channel	:		

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
1,3-Dichloropropane	0.781	0.831	-	-6.4	20	88	0
1,2-Dibromoethane	0.421	0.454	-	-7.8	20	87	0
2-Hexanone	0.245	0.223	-	9	20	82	0
Chlorobenzene	1.301	1.385	-	-6.5	20	89	0
Ethylbenzene	2.08	2.056	-	1.2	20	87	0
1,1,1,2-Tetrachloroethane	0.614	0.613	-	0.2	20	86	0
p/m Xylene	0.623	0.655	-	-5.1	20	99	0
o Xylene	0.655	0.629	-	4	20	100	0
Styrene	1.295	1.147	-	11.4	20	88	0
1,4-Dichlorobenzene-d4	1	1	-	0	20	92	0
Bromoform	0.624	0.613	-	1.8	20	82	0
Isopropylbenzene	5.499	5.74	-	-4.4	20	88	0
4-Bromofluorobenzene	1.073	1.08	-	-0.7	20	92	0
Bromobenzene	1.377	1.452	-	-5.4	20	94	0
n-Propylbenzene	5.077	5.28	-	-4	20	88	0
1,1,1,2-Tetrachloroethane	0.991	1.092	-	-10.2	20	98	0
2-Chlorotoluene	3.328	3.21	-	3.5	20	85	0
1,3,5-Trimethylbenzene	2.276	2.24	-	1.6	20	88	0
1,2,3-Trichloropropane	0.753	0.839	-	-11.4	20	98	0
4-Chlorotoluene	2.894	2.752	-	4.9	20	87	0
tert-Butylbenzene	3.398	3.699	-	-8.9	20	89	0
1,2,4-Trimethylbenzene	2.467	2.485	-	-0.7	20	90	0
sec-Butylbenzene	4.84	5.373	-	-11	20	87	0
p-Isopropyltoluene	3.433	3.732	-	-8.7	20	86	0
1,3-Dichlorobenzene	2.1	2.068	-	1.5	20	84	0
1,4-Dichlorobenzene	1.989	1.968	-	1.1	20	87	0
n-Butylbenzene	2.872	3.493	-	-21.6*	20	83	0
1,2-Dichlorobenzene	1.96	2.008	-	-2.4	20	86	0
1,2-Dibromo-3-chloropropan	10	9.77	-	2.3	20	94	-.01
Hexachlorobutadiene	10	10.608	-	-6.1	20	84	0
1,2,4-Trichlorobenzene	0.686	0.719	-	-4.8	20	82	0
Naphthalene	1.075	1.153	-	-7.3	20	89	0
1,2,3-Trichlorobenzene	0.557	0.6	-	-7.7	20	82	0

* Value outside of QC limits.



Continuing Calibration Form 7

Client	: Environmental Strategies & Mgmt.	Lab Number	: L1706325
Project Name	: EASTHAM LANDFILL	Project Number	: 2015-055
Instrument ID	: QUIMBY	Calibration Date	: 03/07/17 05:10
Lab File ID	: VQ170307A03	Init. Calib. Date(s)	: 01/30/17 01/30/17
Sample No	: WG983461-2	Init. Calib. Times	: 09:04 12:43
Channel	:		

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
Fluorobenzene	1	1	-	0	20	83	0
Dichlorodifluoromethane	0.503	0.532	-	-5.8	20	79	0
Chloromethane	0.631	0.598	-	5.2	20	77	0
Vinyl chloride	0.559	0.669	-	-19.7	20	90	0
Bromomethane	10	9.799	-	2	20	94	0
Chloroethane	0.348	0.405	-	-16.4	20	91	0
Trichlorofluoromethane	0.574	0.686	-	-19.5	20	94	0
Ethyl ether	0.155	0.179	-	-15.5	20	90	0
1,1-Dichloroethene	0.338	0.406	-	-20.1*	20	95	0
Carbon disulfide	1.059	1.154	-	-9	20	90	0
Methylene chloride	0.411	0.454	-	-10.5	20	89	0
Acetone	10	9.82	-	1.8	20	79	0
trans-1,2-Dichloroethene	0.389	0.447	-	-14.9	20	93	0
Methyl tert-butyl ether	0.749	0.78	-	-4.1	20	85	0
Diisopropyl ether	1.331	1.382	-	-3.8	20	83	0
1,1-Dichloroethane	0.778	0.862	-	-10.8	20	89	0
Ethyl tert-butyl ether	1.054	1.115	-	-5.8	20	87	0
cis-1,2-Dichloroethene	0.412	0.472	-	-14.6	20	92	0
2,2-Dichloropropane	10	10.361	-	-3.6	20	97	0
Bromochloromethane	0.151	0.179	-	-18.5	20	96	0
Chloroform	0.689	0.768	-	-11.5	20	90	0
Carbon tetrachloride	10	10.679	-	-6.8	20	98	0
Tetrahydrofuran	0.059	0.055	-	6.8	20	75	0
Dibromofluoromethane	0.21	0.216	-	-2.9	20	85	0
1,1,1-Trichloroethane	0.632	0.727	-	-15	20	93	0
2-Butanone	10	9.682	-	3.2	20	80	-.01
1,1-Dichloropropene	0.606	0.691	-	-14	20	91	0
Benzene	1.714	1.95	-	-13.8	20	92	0
tert-Amyl methyl ether	0.802	0.853	-	-6.4	20	88	0
1,2-Dichloroethane-d4	0.238	0.212	-	10.9	20	73	0
1,2-Dichloroethane	0.495	0.526	-	-6.3	20	84	0
Trichloroethene	0.447	0.501	-	-12.1	20	91	0
Dibromomethane	0.175	0.197	-	-12.6	20	90	0
1,2-Dichloropropane	0.427	0.474	-	-11	20	89	0
Bromodichloromethane	0.495	0.545	-	-10.1	20	91	0
1,4-Dioxane	0.00158	0.00149*	-	5.7	20	77	0
cis-1,3-Dichloropropene	10	10.092	-	-0.9	20	91	0
Chlorobenzene-d5	1	1	-	0	20	96	0
Toluene-d8	1.284	1.198	-	6.7	20	87	0
Toluene	1.445	1.449	-	-0.3	20	90	0
4-Methyl-2-pentanone	0.093	0.083*	-	10.8	20	85	0
Tetrachloroethene	0.548	0.59	-	-7.7	20	99	0
trans-1,3-Dichloropropene	10	9.092	-	9.1	20	95	0
1,1,2-Trichloroethane	0.253	0.257	-	-1.6	20	93	0
Chlorodibromomethane	0.338	0.343	-	-1.5	20	97	0

* Value outside of QC limits.



Continuing Calibration Form 7

Client	: Environmental Strategies & Mgmt.	Lab Number	: L1706325
Project Name	: EASTHAM LANDFILL	Project Number	: 2015-055
Instrument ID	: QUIMBY	Calibration Date	: 03/07/17 05:10
Lab File ID	: VQ170307A03	Init. Calib. Date(s)	: 01/30/17 01/30/17
Sample No	: WG983461-2	Init. Calib. Times	: 09:04 12:43
Channel	:		

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
1,3-Dichloropropane	0.569	0.56	-	1.6	20	90	0
1,2-Dibromoethane	0.287	0.287	-	0	20	93	0
2-Hexanone	0.154	0.132	-	14.3	20	81	0
Chlorobenzene	1.54	1.551	-	-0.7	20	92	0
Ethylbenzene	2.868	2.779	-	3.1	20	90	0
1,1,1,2-Tetrachloroethane	0.436	0.467	-	-7.1	20	102	0
p/m Xylene	0.941	0.913	-	3	20	93	0
o Xylene	0.866	0.85	-	1.8	20	93	0
Styrene	1.41	1.39	-	1.4	20	92	0
1,4-Dichlorobenzene-d4	1	1	-	0	20	112	.01
Bromoform	10	8.437	-	15.6	20	105	0
Isopropylbenzene	6.841	6.107	-	10.7	20	93	0
4-Bromofluorobenzene	1.26	1.152	-	8.6	20	99	0
Bromobenzene	1.437	1.283	-	10.7	20	94	0
n-Propylbenzene	7.306	6.53	-	10.6	20	94	0
1,1,2,2-Tetrachloroethane	0.921	0.835	-	9.3	20	93	0
2-Chlorotoluene	4.784	4.194	-	12.3	20	93	0
1,3,5-Trimethylbenzene	3.558	3.356	-	5.7	20	103	0
1,2,3-Trichloropropane	0.74	0.643	-	13.1	20	89	0
4-Chlorotoluene	4.168	3.612	-	13.3	20	93	0
tert-Butylbenzene	4.306	3.956	-	8.1	20	97	0
1,2,4-Trimethylbenzene	3.397	3.307	-	2.6	20	103	0
sec-Butylbenzene	6.45	6.026	-	6.6	20	96	0
p-Isopropyltoluene	4.434	4.319	-	2.6	20	100	.01
1,3-Dichlorobenzene	2.477	2.313	-	6.6	20	99	0
1,4-Dichlorobenzene	2.309	2.175	-	5.8	20	100	0
n-Butylbenzene	4.424	4.404	-	0.5	20	97	0
1,2-Dichlorobenzene	2.116	1.993	-	5.8	20	99	0
1,2-Dibromo-3-chloropropan	10	9.203	-	8	20	98	0
Hexachlorobutadiene	0.697	0.679	-	2.6	20	101	0
1,2,4-Trichlorobenzene	0.844	0.876	-	-3.8	20	105	0
Naphthalene	1.311	1.294	-	1.3	20	99	0
1,2,3-Trichlorobenzene	0.713	0.758	-	-6.3	20	105	0

* Value outside of QC limits.

