

SCANNED

E-SUBMITTAL

RELEASE ABATEMENT MEASURE (RAM) STATUS REPORT
NO. 19 FORMER MANUFACTURED GAS PLANT (MGP) SITE
100 PARCEL B, 129 COMMERCIAL STREET
MALDEN, MASSACHUSETTS
RTN 3-0362 AND LINKED RTN 3-3757
TIER IB PERMIT 7378

SL-01A

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by

Haley & Aldrich, Inc.
East Hartford, Connecticut

for

National Grid
Westborough, Massachusetts

File No. 06558-754
October 2007

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SCANNED

**HALEY &
ALDRICH**

7 October 2007
File No. 06558-754

Massachusetts Department of Environmental Protection
Northeast Regional Office
205B Lowell Street
Wilmington, Massachusetts 01887

Attention: Site Management Branch

Subject: Release Abatement Measure (RAM) Status Report No. 19
Former Manufactured Gas Plant (MGP) Site
Parcel B, 129 Commercial Street
Malden, Massachusetts
RTN 3-0362 and Linked RTN 3-3757
Tier IB Permit 7378

Ladies and Gentlemen:

On behalf of Massachusetts Electric Company d/b/a National Grid (National Grid), Haley & Aldrich, Inc. is submitting this Release Abatement Measure (RAM) Status Report No. 19 for the above referenced site. The BWSC-106 Transmittal form and RAM Remedial Monitoring Report were submitted to the Massachusetts Department of Environmental Protection (DEP) electronically through the e-DEP filing system. Copies of the forms are included in Appendix A of this report. Work on the subject site is being conducted under the Massachusetts Contingency Plan (MCP), 310 CMR 40.0000. This report was prepared in accordance with 310 CMR 40.0445.

RAM Status Report No. 19 presents findings during the reporting period 7 April 2007 through 7 October 2007 related to indoor air sampling and on-going operation and maintenance of the sub-slab venting system (SSVS) located at 129 Commercial Street, Malden, Massachusetts.

BACKGROUND

The subject site is located on Parcel B of the former Malden manufactured gas plant (MGP) site and is currently occupied by a bakery company located at 129 Commercial Street, Malden, Massachusetts. The site is bounded to the north by Charles Street, to the east by Commercial Street, to the south by Adams Street, and to the west by the MBTA Orange Line commuter railway as shown on Figure 1, "Project Locus."

Phase II field investigations associated with the former Malden MGP site identified elevated concentrations of volatile organic compounds (VOCs) and polynuclear aromatic hydrocarbons (PAHs) in soil, and elevated concentrations of VOCs, PAHs, and cyanide in groundwater beneath the 129 Commercial Street building. VOCs were also previously identified in indoor air at the facility. The presence of VOCs in indoor air did not constitute an imminent hazard

for the workers in the building, and applicable occupational standards set by the Occupational Safety and Health Administration (OSHA) and the National Institute for Occupational Safety and Health (NIOSH) were not exceeded. National Grid conducted response actions to reduce VOC concentrations to reduce potential long-term risks.

The original intent of the RAM was to mitigate the VOC migration into indoor air by applying epoxy sealants to selected floor areas inside the bakery building, as described in the 2 July 1998 RAM Plan. The RAM Plan also called for implementation of a second phase of work, consisting of conducting a facility wide sealing program at identified migration pathway points if the first phase floor sealing activities were successful in reducing VOC concentrations in the packaging room. As described in RAM Status Report No. 1 dated 22 January 1999, since floor sealing efforts in the packaging room area of the facility to reduce VOC migration into the building were unsuccessful, the second phase was not implemented.

Haley & Aldrich evaluated alternative response actions to mitigate the VOC migration into indoor air, and submitted a RAM Plan modification to DEP dated 9 April 1999. The RAM modification proposed installation of an active SSVS in the general area of the packaging room where the highest indoor VOC concentrations had been encountered in the past. The active sub-slab venting system was proposed to create a negative pressure gradient beneath the floor slab such that soil vapors would migrate to the sub-slab venting system rather than penetrating through the floor slab into indoor air. The active sub-slab venting was not proposed to remediate the source of contamination.

RAM Status Report No. 2, dated 21 July 1999, outlined the proposed active sub-slab venting system and summarized correspondence with DEP concerning the 9 April 1999 RAM Plan Modification. DEP issued a "Conditional Approval of Release Abatement Measure; Designation of Interim Deadline; M.G.L. 21E & 310 CMR 40.0000," letter dated 9 June 1999 which approved the RAM Plan modification with conditions.

As part of the DEP 9 June 1999 conditional approval, a new RAM Status submittal deadline was established to be within 120 days of the date of the letter, or by 7 October 1999. RAM Status Report No. 3, dated 7 October 1999, was submitted to DEP, and detailed the design and installation of the sub-slab venting system. The system was initially started on 21 October 1999. Details of the initial operation, system adjustments, and pilot test and long term operation plan were described in RAM Status Report No. 4, dated 7 April 2000. RAM Status Report No. 5, dated 6 October 2000 through RAM Status Report No. 18, dated 7 April 2007 detailed operation and maintenance of the sub-slab venting system and summarized indoor air sampling results and system monitoring data collected during the respective reporting periods. RAM Status Report No. 19 details indoor air sampling activities and on-going operation and maintenance of the sub-slab venting system, and summarizes monitoring data collected from 7 April 2007 through 7 October 2007.

Efforts on this project will continue to be coordinated and carried out by the following:

Party of Interest

National Grid
25 Research Drive
Westborough, Massachusetts 01582
Contact: Michele V. Leone, Lead Senior Environmental Engineer
Telephone Number (508) 389-4296

Licensed Site Professional

Richard P. Standish, LSP
Licensed Site Professional No. 2242
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East Hartford, Connecticut 06108-7303
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STATUS OF RESPONSE ACTIONS

On-going System Operation

Haley & Aldrich monitors the sub-slab venting system regularly as part of an ongoing operation and maintenance (O&M) schedule. Total VOC levels in influent and effluent vapor from the off-gas control device (sub-slab venting treatment unit) are measured during these visits with a photoionization detector (PID). In addition, influent and effluent vapor samples are collected and analyzed by gas chromatography (GC) on a monthly basis. The results are discussed below.

Indoor Air Sampling

Between September 2000 and July 2001, indoor air sample pairs were collected during production and non-production hours to evaluate the influence of the facility air handling system on indoor air VOC levels. The air handling system operated at a higher rate during production hours than non-production hours. Test results confirmed higher VOC levels during operating hours than non-operating hours. It is thought that the facility air handling system creates a negative pressure within the building when in operation. Therefore, sampling during production hours is thought to be more protective since the facility air handling system may create a negative pressure within the building, thereby facilitating soil vapor intrusion.

Although biennial indoor air sampling was required in Section III of the RAM approval letter dated 9 June 1999, indoor air sampling is being conducted on an annual basis during the "worse case" winter months, such as January or February, when the building would be more likely to be closed to ambient air. As stated above, indoor air and system operating data demonstrate that the system is efficient and effective, thereby allowing sampling events on an annual basis.

Indoor air samples were not collected during this reporting period. The next round of indoor air samples is scheduled to be collected in early 2008. Previous indoor air test results are summarized on Table I in units of ug/m3.

NEW SITE INFORMATION

Treatment System Influent and Effluent Air Testing

O&M visits have been conducted regularly throughout the reporting period. Influent and effluent readings are currently monitored with a MiniRAE 2000 PID equipped with a 10.6 eV lamp. System influent, mid-carbon (Effluent-1) and post-carbon (Effluent-2) VOC levels were below the detection level of the instrument (0.1 ppm). A graphical representation of influent PID measurements, both previous and new, is presented in Figure 3. A more detailed description of monitoring data is discussed later in this report.

As specified by DEP in their 9 June 1999 conditional approval letter, off-gas control device (sub-slab venting system treatment unit) influent and effluent vapor samples have been collected on a monthly basis and submitted for laboratory analysis. Samples are collected from the system influent port prior to treatment and at effluent ports on each drum of granular activated carbon. Samples are quantitatively tested for benzene, toluene, ethylbenzene, m&p xylene, and o-xylene, and styrene by GC-FID analysis at the Haley & Aldrich laboratory. Results of chemical analysis of SSVS vapor samples, both previous and new, are presented on Table II, and a graphical representation of the test results are shown on Figure 4.

VOCs were not detected in the influent, mid-carbon (Effluent-1), or post-carbon (Effluent-2) samples during this reporting period.

REMEDIAION WASTE MANAGEMENT

No remediation waste was generated or disposed of during this reporting period. Also during the reporting period, there was no accumulation of water within the SSVS. A total of 47 drums, or approximately 7,755 pounds of spent carbon, have been generated and removed from the site since start-up of the sub-slab ventilation system.

MONITORING DATA FROM OPERATION OF THE REMEDIAL SYSTEM

Vacuum and pressure, air velocity, PID readings, and vapor temperature are monitored on a regular basis. System data are presented in Table III.

Vacuum and Discharge Pressure

Vacuum conditions are monitored with fixed vacuum gauges on the influent piping prior to the blower and on the knockout drum. A portable gauge is used to periodically measure vacuum at the individual extraction points (EP-1 through EP-5). Vacuum conditions at extraction points EP-1 through EP-5 ranged from 0.04 inch of water to 1.2 inches of water during this reporting period.

Vacuum at the blower ranged from 10 to 11 inches of water, vacuum at the knockout drum ranged between 3 and 5 inches of water, and discharge pressure ranged between 46 and 48 inches of water during this period. These vacuum measurements are generally consistent with other recent vacuum data for this system.

PID Screening and GC Analysis

VOC levels are screened with a MiniRAE 2000 10.6 eV PID at 3 locations along the vapor stream: Influent (pre-carbon), Effluent-1 (mid-carbon) and Effluent-2 (post-carbon). PID readings of the influent were at background levels (0.0 ppm) as measured throughout the reporting period. A graphical representation of PID readings from system start-up to the present is shown on Figure 3. Effluent PID readings were also at background levels (0.0 ppm) throughout the reporting period.

Air samples were collected on a monthly basis in Tedlar bags and analyzed with a gas chromatograph (GC). Samples were collected from the influent, mid-carbon (Effluent-1), and post-carbon (Effluent-2) positions. VOCs were not detected in the influent, mid-carbon (Effluent-1), or post-carbon (Effluent-2) samples collected during this reporting period. A graphical representation of GC analytical results of the influent from system start-up to the present is shown on Figure 4.

Influent/Effluent Air Velocity and VOC Removal

Air flow in and out of the system is measured with a Dwyer 401T Air Velocity Meter. During this reporting period, the influent flow rate ranged from 250 fpm (22 cfm) to 700 fpm (62 cfm) and the effluent flow rate ranged from 1250 fpm (110 cfm) to 2000 fpm (176 cfm). Based on flow rates and monthly GC analysis of air samples, it is estimated that nearly 900 lbs of VOCs have been removed from beneath the building since commencement of sub-slab ventilation in November 1999.

REMEDIAL MONITORING REPORT

Consistent with DEP requirements, the BWSC-106 A/B Forms (Remedial Monitoring Report) were submitted electronically for this submittal. The form presents information on the SSVS performance during this reporting period.

The 9 June 1999 approval letter does not specify discharge limits in lieu of referring to the 100 pound/year discharge limits specified in DEP Policy #WSC-94-150. Using these criteria and maximum flow rates presented in Table III, a permissible concentration upper limit of

5.429 parts per million by volume (ppmV) as benzene has been calculated for this reporting period. Since target VOCs were not detected in influent, mid-train, and effluent samples tested during this reporting period, the discharge was determined to be within permissible limits.

Copies of the Remedial Monitoring Report BWSC-106 A/B Forms are attached in Appendix A.

SIGNIFICANT NEW INFORMATION

Previously, National Grid began a process of making improvements to the system, which included integration of a telemetry interface, intended to notify Haley & Aldrich if there are non-conformances in blower system performance. The planned interface included telecommunication via a Sensaphone Model 1104 remote monitoring system. During implementation, it was determined that the selected component cellular modem was unable to properly communicate with the Sensaphone system, which communicates via a serial port.

As a result, a hard-wired telemetry interface system has since been integrated into the SSVS. The interface includes conventional telecommunication via a Sensaphone Model 1104 remote monitoring system. Verizon installed the phone line to the system trailer on 13 September 2007. The Sensaphone auto-dialer was connected from the SSVS to the phone line on 14 September 2007 and programmed to notify Haley & Aldrich if there are non-conformances in blower system performance. Verizon activation of the phone line is expected to be by 28 September 2007, and it is planned that the system will be on-line thereafter. In accordance with the RAM Conditional Approval letter dated 27 July 1999, the remote monitoring system will allow the LSP to continually evaluate the system and ensure that any adverse changes are corrected in a timely manner.

FUTURE RESPONSE ACTIONS

Haley & Aldrich will continue to monitor the system monthly during the next reporting period, while the remote system is being initialized. Monitoring will also include monthly GC testing of system influent and effluent as previously conducted. RAM Status Reports will continue to be provided on a six month basis.


System enhancements and alternative response actions were evaluated as part of the Phase III Remedial Action Plan to develop a long-term plan to address indoor air quality at the facility. The Phase III was submitted to DEP in June 2003 and a Remedial Action Alternative (RAA) was recommended. The proposed RAA included an air sparging and/or SVE system installed via Horizontal Directional Drilling (HDD).

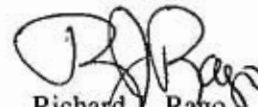
The recent rounds of indoor air sampling data indicate that VOCs are generally not detected or are detected below published residential background values recommended by DEP. These data also indicate that the current system appears to be functioning properly by depressurizing the sub-slab environment and creating the conditions necessary to preclude soil vapor intrusion. Therefore, implementation of an HDD-installed air sparging/SVE system Remedial Action Alternative does not appear to be a necessary mitigation measure at this time.

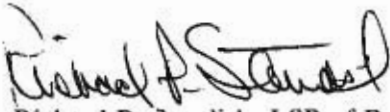
A partial Class C RAO was submitted for the former Malden MGP site in February 2004. National Grid will continue to evaluate the performance of the current sub-slab depressurization system. If it is determined that significant improvements or enhancements are necessary or conditions are appropriate, it is anticipated that the installation of a Remedial Action Alternative system will be conducted as part of the Post-RAO response actions conducted at 129 Commercial Street, and implemented via a modification to the RTN 3-0362/RTN 3-3757 RAM for 129 Commercial Street.

Please do not hesitate to call the undersigned or Michele Leone of National Grid at 508-389-4296 if you have any questions or comments.

Sincerely yours,
HALEY & ALDRICH, INC.


for Kristina M. Gross
Scientist


Richard J. Rago
Senior Scientist


Richard P. Standish, LSP-of-Record
Senior Vice President

Enclosures:

Table I	Summary of Indoor Air Quality Data
Table II	Sub-Slab Venting System Vapor Analytical Data
Table III	Sub-Slab Venting System Monitoring Data
Figure 1	Project Locus
Figure 2	Extraction Well Point and Indoor Air Sample Locations
Figure 3	PID Measurements of Sub-Slab Vapor Influent
Figure 4	GC Analysis of Sub-Slab Vapor Influent
Appendix A	Copy of Form BWSC-106 and RAM Remedial Monitoring Report

c: National Grid; Attn: Michele Leone
KeySpan Energy Delivery of New England; Attn: Richard Schmitz

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TABLE 1

**SUMMARY OF INDOOR AIR QUALITY DATA
129 COMMERCIAL STREET, PARCEL B OF FORMER MALDEN MANUFACTURED GAS PLANT SITE
MALDEN, MASSACHUSETTS**

SAMPLE	ANALYTE	MADEP Indoor Air Background	Site 1	Site 1A	Site 2	Site 3	Sample Results (Results listed in ug/m ³)							Site 10	Site 11
28-Feb-07	Benzene	21	--	--	2.7	--	1.9	2.6	ND(9.1)	ND(28)	ND(53)	--	--	--	ND(53)
	Ethylbenzene	9.62	--	--	ND(1.7)	--	1.8	1.6	ND(9.1)	ND(28)	ND(53)	--	--	--	ND(53)
	m-&p-xylenes	40	--	--	3.5	--	6.7	4.6	ND(9.1)	ND(28)	ND(53)	--	--	--	ND(53)
	Naphthalene	5	--	--	ND(1.7)	--	ND(1.4)	ND(1.2)	ND(9.1)	ND(28)	ND(53)	--	--	--	ND(53)
	o-xylenes	10	--	--	ND(1.7)	--	1.5	1.5	ND(9.1)	ND(28)	ND(53)	--	--	--	ND(53)
	Styrene	2.79	--	--	ND(1.7)	--	ND(1.4)	ND(1.2)	ND(9.1)	ND(28)	ND(53)	--	--	--	ND(53)
	Toluene	28.65	--	--	5.4	--	4.2	5.7	ND(9.1)	ND(28)	ND(53)	--	--	--	ND(53)
19-Apr-06	Benzene	21	--	--	ND(1.5)	--	ND(1)	ND(1.2)	ND(24)	ND(20)	ND(1.7)	--	--	--	--
	Ethylbenzene	9.62	--	--	ND(1.5)	--	1.3	1.5	ND(24)	ND(20)	ND(1.7)	--	--	--	--
	m-&p-xylenes	40	--	--	ND(3)	--	3.8	4.1	ND(48)	ND(41)	ND(3.4)	--	--	--	--
	Naphthalene	5	--	--	ND(1.5)	--	ND(1)	ND(1.2)	ND(24)	ND(20)	ND(1.7)	--	--	--	--
	o-xylenes	10	--	--	ND(1.5)	--	ND(1)	ND(1.2)	ND(24)	ND(20)	ND(1.7)	--	--	--	--
	Styrene	2.79	--	--	ND(1.5)	--	ND(1)	ND(1.2)	ND(24)	ND(20)	ND(1.7)	--	--	--	--
	Toluene	28.65	--	--	3.8	--	5.2	4.2	ND(24)	ND(20)	2.5	--	--	--	--
19-Jan-06	Benzene	21	--	--	ND(1.6)	--	ND(2)	ND(1.4)	ND(1.5)	ND(2.5)	ND(1.8)	--	--	--	ND(1.7)
	Ethylbenzene	9.62	--	--	ND(1.6)	--	ND(2)	ND(1.4)	ND(1.5)	ND(2.5)	ND(1.8)	--	--	--	ND(1.7)
	m-&p-xylenes	40	--	--	ND(1.6)	--	2.6	2.2	2.8	3.4	2.1	--	--	--	2.7
	Naphthalene	5	--	--	ND(1.6)	--	ND(2)	ND(1.4)	ND(1.5)	ND(2.5)	ND(1.8)	--	--	--	ND(1.7)
	o-xylenes	10	--	--	ND(1.6)	--	ND(2)	ND(1.4)	ND(1.5)	ND(2.5)	ND(1.8)	--	--	--	ND(1.7)
	Styrene	2.79	--	--	ND(1.6)	--	ND(2)	ND(1.4)	ND(1.5)	ND(2.5)	ND(1.8)	--	--	--	ND(1.7)
	Toluene	28.65	--	--	2.4	--	6.4	4.2	13	5	3.7	--	--	--	4

TABLE I

**SUMMARY OF INDOOR AIR QUALITY DATA
129 COMMERCIAL STREET, PARCEL B OF FORMER MALDEN MANUFACTURED GAS PLANT SITE
MALDEN, MASSACHUSETTS**

SAMPLE	ANALYTE	MADEP Indoor Air Background	Sample Results (Results listed in ug/m ³)											
			Site 1	Site 1A	Site 2	Site 3	Site 4	Site 5	Site 6	Site 7	Site 8	Site 9	Site 10	Site 11
20-Oct-05	Benzene	21	--	--	ND(1.6)	--	ND(1.5)	ND(1.6)	ND(5.4)	ND(5.9)	ND(5.9)	--	--	ND(6)
	Ethylbenzene	9.62	--	--	ND(1.6)	--	ND(1.5)	ND(1.6)	ND(5.4)	ND(5.9)	ND(5.9)	--	--	ND(6)
	m-&p-xylenes	40	--	--	1.6	--	1.8	1.9	ND(5.4)	ND(5.9)	ND(5.9)	--	--	ND(6)
	Naphthalene	5	--	--	ND(1.6)	--	ND(1.5)	ND(1.6)	ND(5.4)	ND(5.9)	ND(5.9)	--	--	ND(6)
	o-xylenes	10	--	--	ND(1.6)	--	ND(1.5)	ND(1.6)	ND(5.4)	ND(5.9)	ND(5.9)	--	--	ND(6)
	Styrene	2.79	--	--	ND(1.6)	--	ND(1.5)	ND(1.6)	ND(5.4)	ND(5.9)	ND(5.9)	--	--	ND(6)
	Toluene	28.65	--	--	3.9	--	3.2	3.6	9	ND(5.9)	ND(5.9)	--	--	ND(6)
03-Aug-05	Benzene	21	--	--	ND(1.8)	--	ND(1.4)	ND(3.6)	ND(10)	ND(13)	--	--	--	ND(11)
	Ethylbenzene	9.62	--	--	ND(1.8)	--	1.7	ND(3.6)	ND(10)	ND(13)	--	--	--	ND(11)
	m-&p-xylenes	40	--	--	2.8	--	5	5.8	ND(10)	ND(13)	--	--	--	ND(11)
	Naphthalene	5	--	--	ND(1.8)	--	ND(1.4)	ND(3.6)	ND(10)	ND(13)	--	--	--	ND(11)
	o-xylenes	10	--	--	ND(1.8)	--	ND(1.4)	ND(3.6)	ND(10)	ND(13)	--	--	--	ND(11)
	Styrene	2.79	--	--	ND(1.8)	--	ND(1.4)	ND(3.6)	ND(10)	ND(13)	--	--	--	ND(11)
	Toluene	28.65	--	--	4.4	--	7.8	7.6	11	ND(13)	--	--	--	ND(11)
27-Apr-05	Benzene	21	--	--	ND(1.5)	--	ND(1.5)	ND(2)	ND(14)	ND(13)	ND(31)	--	--	ND(42)
	Ethylbenzene	9.62	--	--	ND(1.5)	--	ND(1.5)	ND(2)	ND(14)	ND(13)	ND(31)	--	--	ND(42)
	m-&p-xylenes	40	--	--	ND(1.5)	--	1.7	ND(2)	ND(14)	ND(13)	ND(31)	--	--	ND(42)
	Naphthalene	5	--	--	ND(1.5)	--	ND(1.5)	ND(2)	ND(14)	ND(13)	ND(31)	--	--	ND(42)
	o-xylenes	10	--	--	ND(1.5)	--	ND(1.5)	ND(2)	ND(14)	ND(13)	ND(31)	--	--	ND(42)
	Styrene	2.79	--	--	ND(1.5)	--	ND(1.5)	ND(2)	ND(14)	ND(13)	ND(31)	--	--	ND(42)
	Toluene	28.65	--	--	2.9	--	4.7	7.6	ND(14)	ND(13)	ND(31)	--	--	ND(42)

TABLE 1

SUMMARY OF INDOOR AIR QUALITY DATA
129 COMMERCIAL STREET, PARCEL B OF FORMER MALDEN MANUFACTURED GAS PLANT SITE
MALDEN, MASSACHUSETTS

SAMPLE	ANALYTE	MADEP Indoor Air Background	Site 1	Site 1A	Site 2	Site 3	Site 4	Site 5	Site 6	Site 7	Site 8	Site 9	Site 10	Site 11
13-Jan-05	Benzene	21	--	--	3.8	--	2.6	2.8	2.8	2.8	3.5	--	--	3.4
	Ethylbenzene	9.62	--	--	2.8	--	2.7	3.5	1.5	2.3	2.4	--	--	2.6
	m-&p-xylenes	40	--	--	8.2	--	8	11	3.6	6	6.4	--	--	6.9
	Naphthalene	5	--	--	ND(1.4)	--	ND(1.3)	ND(1.5)	ND(1.2)	ND(1.2)	ND(1.4)	--	--	ND(1.8)
	o-xylenes	10	--	--	2.8	--	2.2	2.6	1.3	1.7	2.1	--	--	2.1
	Styrene	2.79	--	--	ND(1.4)	--	ND(1.3)	ND(1.5)	ND(1.2)	ND(1.2)	1.5	--	--	ND(1.8)
	Toluene	28.65	--	--	18	--	16	16	15	10	12	--	--	13
26-Oct-04	Benzene	21	--	--	2.2	--	ND(1.7)	ND(1.5)	ND(1.8)	1.7	ND(1.5)	--	--	1.9
	Ethylbenzene	9.62	--	--	ND(1.4)	--	ND(1.7)	ND(1.5)	ND(1.8)	ND(1.6)	ND(1.5)	--	--	ND(1.6)
	m-&p-xylenes	40	--	--	3.6	--	3.2	4.4	3.1	4	2.9	--	--	3.5
	Naphthalene	5	--	--	ND(1.4)	--	ND(1.7)	ND(1.5)	ND(1.8)	ND(1.6)	ND(1.5)	--	--	ND(1.6)
	o-xylenes	10	--	--	ND(1.4)	--	ND(1.7)	ND(1.5)	ND(1.8)	ND(1.6)	ND(1.5)	--	--	ND(1.6)
	Styrene	2.79	--	--	ND(1.4)	--	ND(1.7)	ND(1.5)	ND(1.8)	ND(1.6)	ND(1.5)	--	--	ND(1.6)
	Toluene	28.65	--	--	6.8	--	6.7	9	13	6.9	5.1	--	--	6.6
06-Aug-04	Benzene	21	--	--	ND(1.8)	--	ND(3.5)	ND(3.4)	ND(3.3)	ND(3.4)	ND(3.5)	--	ND(35)	--
	Ethylbenzene	9.62	--	--	ND(1.8)	--	ND(3.5)	ND(3.4)	ND(3.3)	ND(3.4)	ND(3.5)	--	ND(35)	--
	m-&p-xylenes	40	--	--	2.9	--	3.5	ND(3.4)	ND(3.3)	ND(3.4)	ND(3.5)	--	ND(35)	--
	Naphthalene	5	--	--	ND(1.8)	--	ND(3.5)	ND(3.4)	ND(3.3)	ND(3.4)	ND(3.5)	--	ND(35)	--
	o-xylenes	10	--	--	ND(1.8)	--	ND(3.5)	ND(3.4)	ND(3.3)	ND(3.4)	ND(3.5)	--	ND(35)	--
	Styrene	2.79	--	--	ND(1.8)	--	ND(3.5)	ND(3.4)	ND(3.3)	ND(3.4)	ND(3.5)	--	ND(35)	--
	Toluene	28.65	--	--	5.1	--	9	7.5	ND(3.3)	ND(3.4)	3.6	--	ND(35)	--

TABLE I
SUMMARY OF INDOOR AIR QUALITY DATA
129 COMMERCIAL STREET, PARCEL B OF FORMER MALDEN MANUFACTURED GAS PLANT SITE
MALDEN, MASSACHUSETTS

SAMPLE	ANALYTE	MADEP Indoor Air Background	Site 1	Site 1A	Site 2	Site 3	Site 4	Site 5	Site 6	Site 7	Site 8	Site 9	Site 10	Site 11
06-May-04	Benzene	21	--	--	ND(1.5)	--	ND(1.9)	1.7	ND(1.9)	ND(1.8)	ND(2.1)	--	ND(1.9)	--
	Ethylbenzene	9.62	--	--	ND(1.5)	--	ND(1.9)	1.7	ND(1.9)	2	ND(2.1)	--	ND(1.9)	--
	m-&p-xylenes	40	--	--	2.9	--	3.5	4.2	4	7.6	5.4	--	6.4	--
	Naphthalene	5	--	--	ND(1.5)	--	ND(1.9)	ND(1.6)	ND(1.9)	ND(1.8)	ND(2.1)	--	ND(1.9)	--
	o-xylenes	10	--	--	ND(1.5)	--	ND(1.9)	1.6	ND(1.9)	3	2.2	--	2.6	--
	Styrene	2.79	--	--	ND(1.5)	--	ND(1.9)	ND(1.6)	ND(1.9)	ND(1.8)	ND(2.1)	--	2.8	--
	Toluene	28.65	--	--	85	--	33	72	18	13	8.7	--	11	--
12-Feb-04	Benzene	21	--	--	20.8	--	ND(1.7)	ND(1.7)	ND(8.6)	ND(12.8)	ND(18.5)	--	ND(20.1)	--
	Ethylbenzene	9.62	--	--	16.9	--	ND(1.6)	ND(1.7)	ND(8.7)	ND(13)	ND(18.7)	--	ND(20)	--
	m-&p-xylenes	40	--	--	52.1	--	2	3	ND(8.7)	ND(13)	ND(18.7)	--	ND(20)	--
	Naphthalene	5	--	--	2	--	ND(1.7)	ND(1.7)	ND(8.9)	ND(13.1)	ND(18.3)	--	ND(19.9)	--
	o-xylenes	10	--	--	18.7	--	ND(1.6)	ND(1.7)	ND(8.7)	ND(13)	ND(18.7)	--	ND(20)	--
	Styrene	2.79	--	--	2.1	--	ND(1.7)	ND(1.7)	ND(8.5)	ND(12.8)	ND(18.7)	--	ND(20)	--
	Toluene	28.65	--	--	71.6	--	4.5	5.3	56.5	ND(12.8)	ND(18.5)	--	ND(20)	--
30-Oct-03	Benzene	21	--	--	1.9	--	ND(1.7)	ND(1.5)	--	ND(1.8)	ND(3.5)	--	ND(3.8)	--
	Ethylbenzene	9.62	--	--	ND(1.6)	--	ND(1.7)	2.4	--	ND(1.9)	ND(3.5)	--	ND(3.7)	--
	m-&p-xylenes	40	--	--	3	--	5.2	7.8	--	5.2	ND(3.5)	--	ND(3.7)	--
	Naphthalene	5	--	--	ND(1.6)	--	ND(1.7)	ND(1.5)	--	ND(1.8)	ND(3.5)	--	ND(3.7)	--
	o-xylenes	10	--	--	ND(1.6)	--	ND(1.7)	ND(1.5)	--	ND(1.8)	ND(3.5)	--	7.4	--
	Styrene	2.79	--	--	ND(1.6)	--	ND(1.7)	ND(1.5)	--	ND(1.9)	ND(3.4)	--	ND(3.7)	--
	Toluene	28.65	--	--	6	--	27.1	23	--	23	13.2	--	10.2	--

TABLE I

**SUMMARY OF INDOOR AIR QUALITY DATA
129 COMMERCIAL STREET, PARCEL B OF FORMER MALDEN MANUFACTURED GAS PLANT SITE
MALDEN, MASSACHUSETTS**

SAMPLE	ANALYTE	MADEP Indoor Air Background	Sample Results (Results listed in ug/m ³)											
			Site 1	Site 1A	Site 2	Site 3	Site 4	Site 5	Site 6	Site 7	Site 8	Site 9	Site 10	Site 11
23-Jul-03	Benzene	21	ND(1.9)	--	--	--	ND(1.8)	ND(1.6)	ND(3.5)	ND(3.8)	ND(2.5)	--	ND(3.8)	--
	Ethylbenzene	9.62	ND(1.9)	--	--	--	ND(1.8)	ND(1.6)	ND(3.6)	ND(3.9)	ND(2.5)	--	ND(3.8)	--
	m-&p-xylenes	40	ND(1.9)	--	--	--	2.3	2.6	ND(3.6)	ND(3.9)	2.5	--	5.6	--
	Naphthalene	5	ND(1.8)	--	--	--	ND(1.8)	ND(1.6)	ND(3.6)	ND(4)	ND(2.5)	--	ND(3.8)	--
	o-xylenes	10	ND(1.9)	--	--	--	ND(1.8)	ND(1.6)	ND(3.6)	ND(3.9)	ND(2.5)	--	ND(3.8)	--
	Styrene	2.79	ND(1.9)	--	--	--	ND(1.8)	ND(1.7)	ND(3.6)	ND(4)	ND(2.5)	--	28.5	--
	Toluene	28.65	23.7	--	--	--	52.7	64	56.5	27.9	35.8	--	35.4	--
25-Apr-03	Benzene	21	--	--	ND(1.9)	--	ND(1.8)	ND(4.2)	ND(95.8)	ND(38.3)	ND(38.3)	--	ND(108.6)	--
	Ethylbenzene	9.62	--	--	ND(1.9)	--	ND(1.8)	ND(4)	ND(95.5)	ND(39.1)	ND(39.5)	--	ND(108.5)	--
	m-&p-xylenes	40	--	--	ND(1.9)	--	ND(1.8)	ND(4)	ND(95.5)	ND(39.1)	ND(39.5)	--	ND(108.5)	--
	Naphthalene	5	--	--	ND(1.9)	--	ND(1.8)	ND(4)	ND(94.3)	ND(39.3)	ND(39.8)	--	ND(104.8)	--
	o-xylenes	10	--	--	ND(1.9)	--	ND(1.8)	ND(4)	ND(95.5)	ND(39.1)	ND(39.5)	--	ND(108.5)	--
	Styrene	2.79	--	--	ND(1.9)	--	ND(1.8)	ND(4)	ND(93.7)	ND(39.2)	ND(39.6)	--	ND(106.4)	--
	Toluene	28.65	--	--	4.1	--	23.7	41.4	ND(94.2)	ND(37.7)	ND(41.4)	--	ND(105.5)	--
24-Jan-03	Benzene	21	--	--	1.9	--	ND(1.5)	ND(1.3)	ND(1.6)	ND(2.2)	ND(1.8)	--	ND(1.8)	--
	Ethylbenzene	9.62	--	--	ND(1.5)	--	ND(1.5)	ND(1.3)	ND(1.6)	ND(2.2)	ND(1.8)	--	ND(1.7)	--
	m-&p-xylenes	40	--	--	2.5	--	ND(1.5)	1.6	2.3	ND(2.2)	ND(1.8)	--	2.5	--
	Naphthalene	5	--	--	ND(1.5)	--	ND(1.5)	ND(1.3)	ND(1.6)	ND(2.2)	ND(1.8)	--	ND(1.7)	--
	o-xylenes	10	--	--	1.5	--	ND(1.5)	ND(1.3)	ND(1.6)	ND(2.2)	ND(1.8)	--	ND(3.9)	--
	Styrene	2.79	--	--	ND(1.5)	--	ND(1.5)	ND(1.3)	ND(1.6)	ND(2.2)	ND(1.8)	--	4.3	--
	Toluene	28.65	--	--	4.1	--	2.4	2.9	2.4	2.3	ND(1.8)	--	2	--

TABLE I

**SUMMARY OF INDOOR AIR QUALITY DATA
129 COMMERCIAL STREET, PARCEL B OF FORMER MALDEN MANUFACTURED GAS PLANT SITE
MALDEN, MASSACHUSETTS**

SAMPLE	ANALYTE	MADEP Indoor Air Background	Sample Results (Results listed in ug/m ³)											
			Site 1	Site 1A	Site 2	Site 3	Site 4	Site 5	Site 6	Site 7	Site 8	Site 9	Site 10	Site 11
08-Oct-02	Benzene	21	--	--	ND(2.3)	--	ND(1.2)	--	ND(2.1)	ND(2)	ND(2)	--	1.9	--
	Ethylbenzene	9.62	--	--	ND(2.3)	--	ND(1.2)	--	ND(2.1)	ND(2)	ND(2)	--	3.6	--
	m-&p-xylenes	40	--	--	1.6	--	2.6	--	2.1	ND(2)	ND(2)	--	6.1	--
	Naphthalene	5	--	--	ND(2.3)	--	ND(1.2)	--	ND(2.1)	ND(2)	ND(2)	--	ND(1.7)	--
	o-xylenes	10	--	--	ND(2.3)	--	ND(1.2)	--	ND(2.1)	ND(2)	ND(2)	--	2.5	--
	Styrene	2.79	--	--	ND(2.3)	--	ND(1.1)	--	ND(2.1)	ND(2)	ND(2)	--	23.4	--
	Toluene	28.65	--	--	4.5	--	24.5	--	45.2	8.7	6.8	--	9.4	--
25-Jun-02	Benzene	21	--	--	--	--	1.4	ND(1)	6.1	5.7	3.1	--	5.4	--
	Ethylbenzene	9.62	--	--	--	--	3.1	2.5	ND(1)	ND(1)	ND(2)	--	3.1	--
	m-&p-xylenes	40	--	--	--	--	8.7	6.5	2.6	3	3	--	5.6	--
	Naphthalene	5	--	--	--	--	ND(1)	ND(1)	ND(1)	ND(1)	ND(2)	--	ND(1)	--
	o-xylenes	10	--	--	--	--	2.2	ND(1)	ND(1)	ND(1)	ND(2)	--	2.2	--
	Styrene	2.79	--	--	--	--	ND(1)	ND(1)	ND(1)	ND(1)	ND(2)	--	20	--
	Toluene	28.65	--	--	--	--	34.7	49	41.4	18.8	8.7	--	8.3	--
10-Apr-02	Benzene	21	--	--	ND(1)	--	ND(1)	ND(1)	ND(20.1)	4.5	ND(20.1)	--	ND(20.1)	--
	Ethylbenzene	9.62	--	--	ND(1)	--	ND(1)	1.3	ND(20)	ND(2)	ND(20)	--	ND(20)	--
	m-&p-xylenes	40	--	--	2.3	--	2.4	4.3	ND(20)	ND(2)	ND(20)	--	ND(20)	--
	Naphthalene	5	--	--	ND(1)	--	ND(1)	ND(1)	ND(19.9)	ND(2)	ND(19.9)	--	ND(19.9)	--
	o-xylenes	10	--	--	ND(1)	--	ND(1)	ND(1)	ND(20)	ND(2)	ND(20)	--	ND(20)	--
	Styrene	2.79	--	--	ND(1)	--	ND(1)	ND(1)	ND(20)	ND(2)	ND(20)	--	ND(20)	--
	Toluene	28.65	--	--	4.1	--	19.2	14.3	ND(20)	11.3	ND(20)	--	ND(20)	--

TABLE I
SUMMARY OF INDOOR AIR QUALITY DATA
129 COMMERCIAL STREET, PARCEL B OF FORMER MALDEN MANUFACTURED GAS PLANT SITE
MALDEN, MASSACHUSETTS

SAMPLE	ANALYTE	MADEP Indoor Air Background	Site 1	Site 1A	Site 2	Site 3	Sample Results (Results listed in ug/m ³)									
							Site 4	Site 5	Site 6	Site 7	Site 8	Site 9	Site 10	Site 11		
10-Jan-02	Benzene	21	--	--	--	--	ND(1)	ND(2)	38.3	44.7	47.9	--	31.9	--		
	Ethylbenzene	9.62	--	--	--	--	ND(1)	ND(2)	ND(4)	ND(4)	ND(7.8)	--	ND(7.8)	--		
	m-&p-xylenes	40	--	--	--	--	4.3	4.8	ND(4)	ND(4)	ND(7.8)	--	ND(7.8)	--		
	Naphthalene	5	--	--	--	--	ND(1)	ND(2)	ND(4)	ND(4)	ND(7.9)	--	ND(7.9)	--		
	o-xylenes	10	--	--	--	--	ND(1)	ND(2)	ND(4)	ND(4)	ND(7.8)	--	ND(7.8)	--		
	Styrene	2.79	--	--	--	--	ND(1)	ND(2)	ND(4)	ND(4)	ND(8.1)	--	8.9	--		
	Toluene	28.65	--	--	--	--	19.6	19.2	37.7	13.2	10.5	--	10.9	--		
11-Oct-01	Benzene	21	ND(1)	--	--	--	ND(1)	ND(2)	10.9	11.5	12.5	--	7.7	--		
	Ethylbenzene	9.62	ND(1)	--	--	--	1.9	ND(2)	ND(1)	ND(1)	ND(2)	--	3.2	--		
	m-&p-xylenes	40	ND(1)	--	--	--	5.6	3.5	2.8	2.5	3	--	5.2	--		
	Naphthalene	5	ND(1)	--	--	--	ND(1)	ND(2)	ND(1)	ND(1)	ND(2)	--	ND(1)	--		
	o-xylenes	10	ND(1)	--	--	--	2	ND(2)	ND(1)	ND(1)	ND(2)	--	2.2	--		
	Styrene	2.79	ND(1)	--	--	--	ND(1)	ND(2)	ND(1)	ND(1)	ND(2)	--	15.8	--		
	Toluene	28.65	4.1	--	--	--	20.7	17.3	31.3	10.9	7.9	--	8.3	--		
01-Jul-01	Benzene	21	--	--	ND(2)	--	ND(2)	ND(2)	ND(2)	ND(2)	ND(2)	--	--	--		
	Ethylbenzene	9.62	--	--	ND(2)	--	ND(2)	ND(2)	ND(2)	ND(2)	ND(2)	--	--	--		
	m-&p-xylenes	40	--	--	ND(2)	--	ND(2)	ND(2)	2	2.2	ND(2)	--	--	--		
	Naphthalene	5	--	--	ND(2)	--	ND(2)	ND(2)	ND(2)	1.7	ND(2)	--	--	--		
	o-xylenes	10	--	--	ND(2)	--	ND(2)	ND(2)	ND(2)	ND(2)	ND(2)	--	--	--		
	Styrene	2.79	--	--	ND(2)	--	ND(2)	ND(2)	6.4	2.8	3.5	--	--	--		
	Toluene	28.65	--	--	4.5	--	6.4	109.2	8.3	9.4	9.4	--	--	--		

TABLE I
SUMMARY OF INDOOR AIR QUALITY DATA
129 COMMERCIAL STREET, PARCEL B OF FORMER MALDEN MANUFACTURED GAS PLANT SITE
MALDEN, MASSACHUSETTS

SAMPLE	ANALYTE	MADEP Indoor Air Background	Sample Results (Results listed in ug/m ³)											
			Site 1	Site 1A	Site 2	Site 3	Site 4	Site 5	Site 6	Site 7	Site 8	Site 9	Site 10	Site 11
29-Jun-01	Benzene	21	--	--	ND(1)	--	2.2	6.7	31.6	35.1	35.1	--	30.7	--
	Ethylbenzene	9.62	--	--	ND(1)	--	6.5	3.7	ND(1)	ND(1)	ND(1)	--	10.9	--
	m-&p-xylenes	40	--	--	3.4	--	23	12.2	3.3	4.3	3.3	--	13.5	--
	Naphthalene	5	--	--	ND(1)	--	5.8	ND(1)	ND(1)	2.5	3.4	--	41.9	--
	o-xylenes	10	--	--	ND(1)	--	6.9	3.7	ND(1)	ND(1)	ND(1)	--	6.1	--
	Styrene	2.79	--	--	ND(1)	--	ND(1)	ND(1)	2.7	ND(1)	1.7	--	25.5	--
	Toluene	28.65	--	--	7.2	--	16.6	67.8	52.7	20.7	9.4	--	16.6	--
18-Mar-01	Benzene	21	--	--	ND(1)	--	ND(1)	ND(1)	ND(2)	ND(2)	ND(1)	--	16.3	--
	Ethylbenzene	9.62	--	--	ND(1)	--	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)	--	5.2	--
	m-&p-xylenes	40	--	--	ND(1)	--	ND(1)	ND(1)	3.1	3.2	4.1	--	13	--
	Naphthalene	5	--	--	ND(1)	--	ND(1)	ND(1)	ND(2.5)	ND(2)	ND(1)	--	ND(1)	--
	o-xylenes	10	--	--	ND(1)	--	ND(1)	ND(1)	ND(2)	ND(2)	ND(1)	--	4.8	--
	Styrene	2.79	--	--	ND(1)	--	ND(1)	ND(1)	ND(2)	ND(2)	ND(1)	--	14.5	--
	Toluene	28.65	--	--	ND(1)	--	4.1	4.5	15.4	25.6	64	--	35.8	--
16-Mar-01	Benzene	21	--	--	4.2	--	63.9	ND(1)	24.3	29.7	41.5	--	26.2	--
	Ethylbenzene	9.62	--	--	9.1	--	269.1	2.8	ND(1)	1.7	1.8	--	4.2	--
	m-&p-xylenes	40	--	--	15.6	--	208.3	10	5.2	5.2	5.6	--	10.9	--
	Naphthalene	5	--	--	23.1	--	256.8	ND(1)	ND(1)	3.1	2.7	--	ND(1)	--
	o-xylenes	10	--	--	7.8	--	86.8	2.4	2.3	ND(1)	2.7	--	6.9	--
	Styrene	2.79	--	--	1.7	--	37	ND(1)	ND(1)	ND(1)	1.3	--	12.8	--
	Toluene	28.65	--	--	24.5	--	226	21.5	64	23.4	97.9	--	34.3	--

Nag, Veena (DEP)

Recd 10/10

From: Babrouli, Ida (DEP)
Sent: Thursday, October 04, 2007 5:13 PM
To: Nag, Veena (DEP)
Subject: FW: Email confirmation from eDEP Transaction 146496

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Form Name: BWSC 106 RAM Transmittal Form

RTN: 3-362
Location: BOSTON GAS COMPANY MALDEN PLANT
Address: 100 COMMERCIAL ST
MALDEN
021480000
Person Making Submittal
MASS ELECTRIC CO DBA NATIONAL GRID
MICHELE
LEONE
25 RESEARCH DRIVE
WESTBOROUGH
MA
015820000
LSP
LSP #: 2242
LSP Name: RICHARD P
STANDISH
Person Making Certification
MASS ELECTRIC CO DBA NATIONAL GRID
MICHELE LEONE
MASS ELECTRIC CO DBA NATIONAL GRID
MICHELE LEONE

rmrint

TABLE I

SUMMARY OF INDOOR AIR QUALITY DATA
129 COMMERCIAL STREET, PARCEL B OF FORMER MALDEN MANUFACTURED GAS PLANT SITE
MALDEN, MASSACHUSETTS

SAMPLE	ANALYTE	MADEP Indoor Air Background	Site 1	Site 1A	Site 2	Site 3	Sample Results (Results listed in ug/m ³)	Site 4	Site 5	Site 6	Site 7	Site 8	Site 9	Site 10	Site 11
03-Dec-00	Benzene	21	--	--	2.4	--	--	1.3	TR(1.3)	2.5	2.2	TR(1.9)	--	11	--
	Ethylbenzene	9.62	--	--	1.1	--	--	ND(1)	ND(2)	ND(1)	ND(2)	ND(2)	--	3.9	--
	m-&p-xylenes	40	--	--	3.2	--	--	1.5	TR(1.8)	2.3	2	2.1	--	6.6	--
	Naphthalene	5	--	--	ND(1)	--	--	ND(1)	ND(2)	1.2	ND(2)	ND(2)	--	TR(1.6)	--
	o-xylenes	10	--	--	1.3	--	--	ND(1)	ND(2)	ND(1)	ND(2)	ND(2)	--	2.7	--
	Styrene	2.79	--	--	ND(1)	--	--	ND(1)	ND(2)	ND(1)	ND(2)	ND(2)	--	30	--
	Toluene	28.65	--	--	6.3	--	--	5	5.6	5.2	5.7	5.3	--	6.4	--
01-Dec-00	Benzene	21	--	--	3.2	--	--	1.6	1.9	13	16	14	--	23	--
	Ethylbenzene	9.62	--	--	1.7	--	--	ND(1)	TR(0.99)	TR(1.5)	TR(1.4)	ND(1)	--	3.8	--
	m-&p-xylenes	40	--	--	5.2	--	--	2.3	2.9	3.9	3.9	2.3	--	7.3	--
	Naphthalene	5	--	--	ND(1)	--	--	ND(1)	ND(1)	TR(1.3)	2.5	ND(1)	--	2.1	--
	o-xylenes	10	--	--	1.9	--	--	ND(1)	1	TR(1.2)	TR(1.2)	ND(1)	--	2.8	--
	Styrene	2.79	--	--	ND(1)	--	--	ND(1)	ND(1)	TR(1.5)	TR(1.2)	ND(1)	--	25	--
	Toluene	28.65	--	--	13	--	--	22	14	16	12	21	--	9.6	--
22-Oct-00	Benzene	21	--	--	1.4	--	--	--	--	1.7	--	--	--	--	--
	Ethylbenzene	9.62	--	--	ND(1)	--	--	--	--	1.4	--	--	--	--	--
	m-&p-xylenes	40	--	--	2.5	--	--	--	--	5.2	--	--	--	--	--
	Naphthalene	5	--	--	ND(1)	--	--	--	--	2	--	--	--	--	--
	o-xylenes	10	--	--	TR(0.9)	--	--	--	--	1.9	--	--	--	--	--
	Styrene	2.79	--	--	ND(1)	--	--	--	--	3.3	--	--	--	--	--
	Toluene	28.65	--	--	3.7	--	--	--	--	7.4	--	--	--	--	--

TABLE I
SUMMARY OF INDOOR AIR QUALITY DATA
129 COMMERCIAL STREET, PARCEL B OF FORMER MALDEN MANUFACTURED GAS PLANT SITE
MALDEN, MASSACHUSETTS

SAMPLE	ANALYTE	MADEP Indoor Air Background	Sample Results (Results listed in ug/m ³)											
			Site 1	Site 1A	Site 2	Site 3	Site 4	Site 5	Site 6	Site 7	Site 8	Site 9	Site 10	Site 11
20-Oct-00	Benzene	21	--	--	2.8	--	--	--	4.5	--	--	--	--	--
	Ethylbenzene	9.62	--	--	1.3	--	--	--	2	--	--	--	--	--
	m-&p-xylenes	40	--	--	4.3	--	--	--	6.1	--	--	--	--	--
	Naphthalene	5	--	--	ND(1)	--	--	--	11.1	--	--	--	--	--
	o-xylenes	10	--	--	1.6	--	--	--	2.2	--	--	--	--	--
	Styrene	2.79	--	--	ND(1)	--	--	--	2.3	--	--	--	--	--
	Toluene	28.65	--	--	7	--	--	--	22.6	--	--	--	--	--
01-Oct-00	Benzene	21	--	--	1.2	--	--	--	1.6	--	--	--	--	--
	Ethylbenzene	9.62	--	--	ND(1)	--	--	--	1.1	--	--	--	--	--
	m-&p-xylenes	40	--	--	1.9	--	--	--	3.2	--	--	--	--	--
	Naphthalene	5	--	--	ND(1)	--	--	--	ND(1)	--	--	--	--	--
	o-xylenes	10	--	--	ND(1)	--	--	--	1.1	--	--	--	--	--
	Styrene	2.79	--	--	ND(1)	--	--	--	1.8	--	--	--	--	--
	Toluene	28.65	--	--	6.7	--	--	--	11.9	--	--	--	--	--
29-Sep-00	Benzene	21	--	--	1.7	--	--	--	24.8	--	--	--	--	--
	Ethylbenzene	9.62	--	--	ND(1)	--	--	--	2.3	--	--	--	--	--
	m-&p-xylenes	40	--	--	2.4	--	--	--	6.5	--	--	--	--	--
	Naphthalene	5	--	--	ND(1)	--	--	--	1.6	--	--	--	--	--
	o-xylenes	10	--	--	ND(1)	--	--	--	1.9	--	--	--	--	--
	Styrene	2.79	--	--	ND(1)	--	--	--	1.7	--	--	--	--	--
	Toluene	28.65	--	--	8.1	--	--	--	17.4	--	--	--	--	--

TABLE I
SUMMARY OF INDOOR AIR QUALITY DATA
129 COMMERCIAL STREET, PARCEL B OF FORMER MALDEN MANUFACTURED GAS PLANT SITE
MALDEN, MASSACHUSETTS

SAMPLE	ANALYTE	MADEP Indoor Air Background	Sample Results (Results listed in ug/m ³)											
			Site 1	Site 1A	Site 2	Site 3	Site 4	Site 5	Site 6	Site 7	Site 8	Site 9	Site 10	Site 11
19-Jul-00	Benzene	21	--	--	3.2	--	2.4	6.1	87.1	93.5	31.6	--	64.5	--
	Ethylbenzene	9.62	--	--	2	--	TR(1.5)	TR(1.3)	TR(1.8)	TR(1.4)	TR(1.2)	--	9.1	--
	m-&p-xylenes	40	--	--	6.5	--	3.7	2.8	4.3	3.3	3.2	--	16.5	--
	Naphthalene	5	--	--	ND(1)	--	ND(1)	ND(1)	3.1	4	TR(1.7)	--	TR(1.4)	--
	o-xylenes	10	--	--	2.5	--	TR(1.4)	TR(1.2)	TR(1.7)	TR(1.3)	TR(1.3)	--	6.5	--
	Styrene	2.79	--	--	ND(1)	--	TR(1.1)	TR(1.4)	6.1	4.1	4.3	--	78.3	--
	Toluene	28.65	--	--	17.8	--	36.3	35.9	35.9	23.3	22.2	--	33.7	--
06-Apr-00	Benzene	21	--	--	2.3	--	TR(1.8)	ND(1)	45.2	32.3	83.9	--	45.2	--
	Ethylbenzene	9.62	--	--	ND(1)	--	16.5	208.7	ND(1)	73.9	17	--	ND(1)	--
	m-&p-xylenes	40	--	--	2.9	--	56.5	739.1	11.7	265.2	60.9	--	10	--
	Naphthalene	5	--	--	ND(1)	--	ND(1)	ND(1)	ND(1)	ND(1)	TR(2.5)	--	ND(1)	--
	o-xylenes	10	--	--	TR(1)	--	9.6	134.8	ND(1)	47.8	10.4	--	TR(4.2)	--
	Styrene	2.79	--	--	ND(1)	--	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	--	9.6	--
	Toluene	28.65	--	--	8.5	--	159.3	2000	125.9	629.6	240.7	--	21.9	--
22-Feb-00	Benzene	21	--	--	2.5	--	2.1	--	58.1	32.3	83.9	--	71	--
	Ethylbenzene	9.62	--	--	1.2	--	1.1	--	2.8	1.7	2.7	--	10	--
	m-&p-xylenes	40	--	--	4	--	3.1	--	8.7	5.2	9.6	--	18.3	--
	Naphthalene	5	--	--	ND(1)	--	ND(1)	--	ND(1)	ND(1)	2.1	--	ND(1)	--
	o-xylenes	10	--	--	1.3	--	1	--	2.9	1.7	2.9	--	6.5	--
	Styrene	2.79	--	--	ND(1)	--	ND(1)	--	1.8	ND(1)	1.8	--	39.1	--
	Toluene	28.65	--	--	8.5	--	9.3	--	32.2	13	16.7	--	23	--

TABLE I
SUMMARY OF INDOOR AIR QUALITY DATA
129 COMMERCIAL STREET, PARCEL B OF FORMER MALDEN MANUFACTURED GAS PLANT SITE
MALDEN, MASSACHUSETTS

SAMPLE	ANALYTE	MADEP Indoor Air Background	Sample Results (Results listed in ug/m ³)											
			Site 1	Site 1A	Site 2	Site 3	Site 4	Site 5	Site 6	Site 7	Site 8	Site 9	Site 10	Site 11
29-Nov-99	Benzene	21	--	--	3.5	--	1.2	1.8	11.6	11.6	18.1	--	9.7	--
	Ethylbenzene	9.62	--	--	1	--	1.1	1.5	1.2	0.8	TR(0.7)	--	3.8	--
	m-&p-xylenes	40	--	--	3.1	--	3.9	5.2	3	2.3	2.3	--	7	--
	Naphthalene	5	--	--	ND(2.1)	--	ND(2.1)	ND(2.1)	ND(2.1)	ND(2.1)	ND(2.1)	--	ND(2.1)	--
	o-xylenes	10	--	--	TR(1)	--	1.1	1.5	1	0.7	TR(0.7)	--	2.8	--
	Styrene	2.79	--	--	ND(2.2)	--	ND(2.2)	ND(2.2)	1.4	ND(2.2)	1	--	29.6	--
	Toluene	28.65	--	--	7.4	--	9.3	16.7	20.4	8.5	7.8	--	9.3	--
30-Sep-99	Benzene	21	0.9	--	2.1	1.4	TR(1.5)	2.3	61.3	32.3	21.6	--	--	--
	Ethylbenzene	9.62	ND(2.2)	--	1.2	TR(0.9)	TR(1.1)	1.6	17	7.4	4.8	--	--	--
	m-&p-xylenes	40	2	--	3.7	2.8	3.2	3.1	43.5	20.9	13.9	--	--	--
	Naphthalene	5	TR(0.9)	--	1	TR(0.8)	TR(1.6)	1.1	2.2	2.6	2.1	--	--	--
	o-xylenes	10	TR(1)	--	1.7	1.2	TR(1.5)	1.3	12.2	6.5	4.2	--	--	--
	Styrene	2.79	ND(2.2)	--	ND(2.2)	ND(2.2)	ND(2.2)	ND(2.2)	3.3	1.7	165.2	--	--	--
	Toluene	28.65	5.2	--	7	7.8	10.7	9.3	63	18.1	15.9	--	--	--
18-Dec-98	Benzene	21	--	--	--	--	--	--	74.2	22.6	--	--	--	--
	Ethylbenzene	9.62	--	--	--	--	--	--	12.2	7.4	--	--	--	--
	m-&p-xylenes	40	--	--	--	--	--	--	28.7	28.7	--	--	--	--
	Naphthalene	5	--	--	--	--	--	--	ND(1)	2.4	--	--	--	--
	o-xylenes	10	--	--	--	--	--	--	9.6	13	--	--	--	--
	Styrene	2.79	--	--	--	--	--	--	1.3	ND(2)	--	--	--	--
	Toluene	28.65	--	--	--	--	--	--	16.7	13	--	--	--	--

TABLE I
SUMMARY OF INDOOR AIR QUALITY DATA
129 COMMERCIAL STREET, PARCEL B OF FORMER MALDEN MANUFACTURED GAS PLANT SITE
MALDEN, MASSACHUSETTS

SAMPLE	ANALYTE	MADEP Indoor Air Background	Site 1	Site 1A	Site 2	Site 3	Site 4	Site 5	Site 6	Site 7	Site 8	Site 9	Site 10	Site 11
Sample Results (Results listed in ug/m ³)														
22-Dec-97	Benzene	21	--	--	6.8	--	--	--	58.1	19.7	--	--	--	--
	Ethylbenzene	9.62	--	--	3	--	--	--	5.2	8.7	--	--	--	--
	m-&p-xylenes	40	--	--	10.4	--	--	--	5.7	26.1	--	--	--	--
	Naphthalene	5	--	--	ND(2.1)	--	--	--	ND(2.1)	TR(1.1)	--	--	--	--
	o-xylenes	10	--	--	3.9	--	--	--	1.7	8.7	--	--	--	--
	Styrene	2.79	--	--	ND(2.2)	--	--	--	1.3	3.5	--	--	--	--
	Toluene	28.65	--	--	18.1	--	--	--	9.6	81.5	--	--	--	--
19-Nov-97	Benzene	21	2.9	--	6.1	3.5	2.6	6.1	196.8	41.9	24.2	--	--	--
	Ethylbenzene	9.62	ND(0.9)	--	3.9	1.3	1.7	4.8	11.7	4.3	3	--	--	--
	m-&p-xylenes	40	2.6	--	13.5	4.8	4.3	6.5	12.2	8.7	6.5	--	--	--
	Naphthalene	5	ND(1.1)	--	ND(1.1)	ND(1.1)	ND(1.1)	ND(1.1)	ND(1.1)	ND(1.1)	ND(1.1)	--	--	--
	o-xylenes	10	0.9	--	5.2	1.7	1.7	2.6	3.5	2.6	2.2	--	--	--
	Styrene	2.79	ND(0.9)	--	ND(0.9)	ND(0.9)	ND(0.9)	ND(0.9)	1.7	ND(0.9)	2.2	--	--	--
	Toluene	28.65	9.3	--	24.1	12.6	11.1	15.2	19.3	24.4	13.3	--	--	--
18-Jun-94	Benzene	21	--	3.2	--	--	--	5.8	--	3.5	3.5	2.3	--	--
	Ethylbenzene	9.62	--	1.7	--	--	--	4.8	--	61.7	90	69.1	--	--
	m-&p-xylenes	40	--	4.3	--	--	--	10.9	--	149.1	210	162.2	--	--
	Naphthalene	5	--	1.1	--	--	--	2.1	--	1.1	1.1	1.1	--	--
	o-xylenes	10	--	1.3	--	--	--	3.5	--	32.2	45.7	34.3	--	--
	Styrene	2.79	--	TR(0.11)	--	--	--	1.3	--	3.5	3.5	3	--	--
	Toluene	28.65	--	13.3	--	--	--	44.1	--	29.6	20	20	--	--

TABLE I
SUMMARY OF INDOOR AIR QUALITY DATA
129 COMMERCIAL STREET, PARCEL B OF FORMER MALDEN MANUFACTURED GAS PLANT SITE
MALDEN, MASSACHUSETTS

SAMPLE	ANALYTE	MADEP Indoor Air Background	Sample Results (Results listed in ug/m ³)										
			Site 1	Site 1A	Site 2	Site 3	Site 4	Site 5	Site 6	Site 7	Site 8	Site 9	Site 10

NOTES AND ABBREVIATIONS:

1. VOCs (volatile organic compound) were analyzed by EPA Method T014. Results are provided in ug/m³, unless otherwise noted.
2. OSHA PEL: Permissible Exposure Limits for air contaminants in Title 29 CFR Part 1910.1000, Department of Labor, Occupational Safety Health Administration, 1989 and 1993 final ruling. Based on the lowest of the 8-hour average, 15-minute readings, or instantaneous readings.
3. ACGIH TLV: Threshold Limit Values recommended by the ACGIH. Based on the lowest of the 8-hour average, 15-minute readings, or instantaneous readings.
4. NIOSH REL: 1994 Recommended Exposure Limits from the National Institute of Occupational Safety and Health. Based on the lowest of the 8-hour average, 15-minute readings, or instantaneous readings.
5. MADEP Indoor Air Background Values from: MADEP, "Characterizing Risks Posed by Petroleum Contaminated Sites: Implementation of MADEP VPI/EPH Approach," Final Policy, 31 October 2002 (Policy #WSC-02-411); and MCP Toxicity.xls (MCPstrds.zip), 20 December 2001, available at <http://www.state.ma.us/dep/hwsc/files/standard/gw2/gw2.htm>.
6. ND: compound not detected above quantitation limit, number in parentheses is the quantitation limit.
7. TR: compound detected below the quantitation limit, number in parentheses is the quantitation limit.
8. Test Results associated with 6 April 2000 sampling event are not representative of typical indoor air conditions due to interference from products containing VOCs being used inside the facility at the time of sampling.
9. Results collected from the Rooftop sample location on 22 December 1997 are not shown in this table but have been reported in RAM Status reports dated 7 October 2004 and earlier.
10. Due to facility modifications, Sample location 10 is no longer accessible as of October 2004. This location has been replaced by Sample Location 11; refer to Figure 2 for this sample location.

**HALEY
ALDRICH**

Haley & Aldrich, Inc.
800 Connecticut Blvd.
Suite 100
East Hartford, CT 06108-7303

Tel: 860.282.9400
Fax: 860.282.9500
HaleyAldrich.com

Letter of Transmittal

Date 5 October 2007
File Number 06558-754
From Richard J. Rago

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OCT 09 2007

To Massachusetts DEP - Northeast Regional Office
205B Lowell Street
Wilmington, MA 01887

DEP
NORTHEAST REGIONAL OFFICE

Attention Data entry
Copy to file
Subject 129 Commercial Street
Malden, MA
RTN 3-0362 and linked RTN 3-3757

Copies	Date	Description
1	10/7/07	RAM Status Report No. 19
1	10/5/07	eDEP Form; BWSC-106, 106A, and 106B

Last entry

Transmitted via ☐ First class mail ☒ Overnight express ☐ Hand delivery ☐ Other

Remarks

If you have any questions, please call me at 860-290-3115



Massachusetts Department of Environmental Protection

eDEP Transaction Copy

Here is the file you requested for your records.

To retain a copy of this file you must save and/or print.

Username: **KMGROSS12**

Transaction ID: **146496**

Document: **BWSC - Release Abatement Measure Transmittal For**

Size of File: **180.06 K**

Status of Transaction: **SUBMITTED**

Date and Time Created: **10/5/2007::1:20:28 PM**

Note: This file only includes forms that were part of your transaction as of the date and time indicated above. If you need a more current copy of your transaction, return to eDEP and select to "Download a Copy" from the Current Submittals page.



Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC106

RELEASE ABATEMENT MEASURE (RAM)
TRANSMITTAL FORM

Release Tracking Number

Pursuant to 310 CMR 40.0444 - 0446 (Subpart D)

E-SUBMITTAL

362

A. SITE LOCATION:

1. Site Name/Location Aid: **BOSTON GAS COMPANY MALDEN PLANT**

2. Street Address: **100 COMMERCIAL ST**

3. City/Town: **MALDEN**

4. ZIP Code: **02148-0000**

5. UTM Coordinates: a. UTM N: **4698895** b. UTME: **670637**

☒ 6. Check here if a Tier Classification Submittal has been provided to DEP for this disposal site.

☐ a. Tier IA ☒ b. Tier IB ☐ c. Tier IC ☐ d. Tier II

7. If a Tier I Permit has been issued, provide Permit Number: **7378**

B. THIS FORM IS BEING USED TO: (check all that apply)

1. List Submittal Date of Initial RAM Plan (if previously submitted): **7/2/1998**

(mm/dd/yyyy)

2. Submit an Initial Release Abatement Measure (RAM) Plan.

☐ a. Check here if the RAM is being conducted as part of the construction of a permanent structure. If checked, you must specify what type of permanent structure is to be erected in or in the immediate vicinity of the area where the RAM is to be conducted.

b. Specify type of permanent structure: (check all that apply) ☐ i. School ☐ ii. Residential ☐ iii. Commercial

☐ iv. Industrial ☐ v. Other Specify: _____

3. Submit a Modified RAM Plan of a previously submitted RAM Plan.

☒ 4. Submit a RAM Status Report.

☒ 5. Submit a Remedial Monitoring Report. (This report can only be submitted through eDEP, concurrent with a RAM Status Report.)

a. Type of Report: (check one) ☐ i. Initial Report ☒ ii. Interim Report ☐ iii. Final Report

b. Number of Remedial Systems and/or Monitoring Programs: **1**

A separate BWSC106A, RAM Remedial Monitoring Report, must be filed for each Remedial System and/or Monitoring Program addressed by this transmittal form.

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☐ 6. Submit a RAM Completion Statement.

☐ 7. Submit a Revised RAM Completion Statement.

8. Provide Additional RTNs:

a. Check here if this RAM Submittal covers additional Release Tracking Numbers (RTNs). RTNs that have been previously linked to a Primary Tier Classified RTN do not need to be listed here. This section is intended to allow a RAM to cover more than one unclassified RTN and not show permanent linkage to a Primary Tier Classified RTN.

b. Provide the additional Release Tracking Number(s) covered by this RAM Submittal.

☐ - ☐ -

(All sections of this transmittal form must be filled out unless otherwise noted above)



Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC106

RELEASE ABATEMENT MEASURE (RAM)
TRANSMITTAL FORM

Release Tracking Number

3 - 362

Pursuant to 310 CMR 40.0444 - 0446 (Subpart D)

C. RELEASE OR THREAT OF RELEASE: CONDITIONS THAT WARRANT RAM:

1. Identify Media Impacted and Receptors Affected: (check all that apply)

- ☒ a. Air ☐ b. Basement ☐ c. Critical Exposure Pathway ☒ d. Groundwater ☐ e. Residence
☐ f. Paved Surface ☐ g. Private Well ☐ h. Public Water Supply ☐ i. School ☐ j. Sediments
☒ k. Soil ☐ l. Storm Drain ☐ m. Surface Water ☐ n. Unknown ☐ o. Wetland ☐ p. Zone 2
☐ q. Others Specify: _____

2. Identify all sources of the Release or Threat of Release, if known: (check all that apply)

- ☐ a. Above-ground Storage Tank (AST) ☐ b. Boat/Vessel ☐ c. Drums ☐ d. Fuel Tank
☐ e. Pipe/Hose/Line ☐ f. Tanker Truck ☐ g. Transformer ☐ h. Under-ground Storage Tank (UST)
☐ i. Vehicle ☒ j. Others Specify: **FORMER MGP OPERATIONS**

3. Identify Oils and Hazardous Materials Released: (check all that apply)

- ☐ a. Oils ☐ b. Chlorinated Solvents ☐ c. Heavy Metals
☒ d. Others Specify: **MGP CONTAMINANTS: VOCs, PAHS, CYANIDE**

D. DESCRIPTION OF RESPONSE ACTIONS: (check all that apply, for volumes list cumulative amounts)

- | | |
|--|---|
| <input type="checkbox"/> 1. Assessment and/or Monitoring Only | <input type="checkbox"/> 2. Temporary Covers or Caps |
| <input type="checkbox"/> 3. Deployment of Absorbent or Containment Materials | <input type="checkbox"/> 4. Temporary Water Supplies |
| <input checked="" type="checkbox"/> 5. Structure Venting System | <input type="checkbox"/> 6. Temporary Evacuation or Relocation of Residents |
| <input type="checkbox"/> 7. Product or NAPL Recovery | <input type="checkbox"/> 8. Fencing and Sign Posting |
| <input type="checkbox"/> 9. Groundwater Treatment Systems | <input type="checkbox"/> 10. Soil Vapor Extraction |
| <input type="checkbox"/> 11. Bioremediation | <input type="checkbox"/> 12. Air Sparging |



Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC106

RELEASE ABATEMENT MEASURE (RAM)
TRANSMITTAL FORM

Release Tracking Number

3 - 362

Pursuant to 310 CMR 40.0444 - 0446 (Subpart D)

D. DESCRIPTION OF RESPONSE ACTIONS (cont.): (check all that apply, for volumes list cumulative amounts)

☐ 13. Excavation of Contaminated Soils

☐ a. Re-use, Recycling or Treatment

☐ i. On Site Estimated volume in cubic yards _____

☐ ii. Off Site Estimated volume in cubic yards _____

 iia. Receiving Facility: _____ Town: _____ State: _____

 iib. Receiving Facility: _____ Town: _____ State: _____

 iii. Describe: _____

☐ b. Store

☐ i. On Site Estimated volume in cubic yards _____

☐ ii. Off Site Estimated volume in cubic yards _____

 iia. Receiving Facility: _____ Town: _____ State: _____

 iib. Receiving Facility: _____ Town: _____ State: _____

☐ c. Landfill

☐ i. Cover Estimated volume in cubic yards _____

Receiving Facility: _____ Town: _____ State: _____

☐ ii. Disposal Estimated volume in cubic yards _____

Receiving Facility: _____ Town: _____ State: _____

14. Removal of Drums, Tanks or Containers:

a. Describe Quantity and Amount: _____

b. Receiving Facility: _____ Town: _____ State: _____

c. Receiving Facility: _____ Town: _____ State: _____

☒ 15. Removal of Other Contaminated Media:

a. Specify Type and Volume: _____

**TO DATE: 47 55-GALLON DRUMS (APPROXIMATELY 7,755 LBS) OF SPENT
ACTIVATED CARBON**

b. Receiving Facility: **CLEAN HARBORS** Town: **BRISTOL** State: **CT**

c. Receiving Facility: **CLEAN HARBORS** Town: **BRAINTREE** State: **MA**

16. Other Response Actions:

Describe: _____

17. Use of Innovative Technologies:

Describe: _____



Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC106

RELEASE ABATEMENT MEASURE (RAM)
TRANSMITTAL FORM

Release Tracking Number

3 - 362

Pursuant to 310 CMR 40.0444 - 0446 (Subpart D)

E. LSP SIGNATURE AND STAMP :

I attest under the pains and penalties of perjury that I have personally examined and am familiar with this transmittal form, including any and all documents accompanying this submittal. In my professional opinion and judgment based upon application of (i) the standard of care in 309 CMR 4.02(1), (ii) the applicable provisions of 309 CMR 4.02(2) and (3), and 309 CMR 4.03(2), and (iii) the provisions of 309 CMR 4.03(3), to the best of my knowledge, information and belief,

> if Section B of this form indicates that a **Release Abatement Measure Plan** is being submitted, the response action(s) that is (are) the subject of this submittal (i) has (have) been developed in accordance with the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000, (ii) is (are) appropriate and reasonable to accomplish the purposes of such response action(s) as set forth in the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000 and (iii) comply(ies) with the identified provisions of all orders, permits, and approvals identified in this submittal;

> if Section B of this form indicates that a **Release Abatement Measure Status Report** and/or **Remedial Monitoring Report** is being submitted, the response action(s) that is (are) the subject of this submittal (i) is (are) being implemented in accordance with the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000, (ii) is (are) appropriate and reasonable to accomplish the purposes of such response action(s) as set forth in the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000 and (iii) comply(ies) with the identified provisions of all orders, permits, and approvals identified in this submittal;

> if Section B of this form indicates that a **Release Abatement Measure Completion Statement** is being submitted, the response action(s) that is (are) the subject of this submittal (i) has (have) been developed and implemented in accordance with the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000, (ii) is (are) appropriate and reasonable to accomplish the purposes of such response action(s) as set forth in the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000 and (iii) comply(ies) with the identified provisions of all orders, permits, and approvals identified in this submittal:

I am aware that significant penalties may result, including, but not limited to, possible fines and imprisonment, if I submit information which I know to be false, inaccurate or materially incomplete.

1. LSP #: **2242**

2. First Name: **RICHARD P**

3. Last Name: **STANDISH**

4. Telephone: **8602829400**

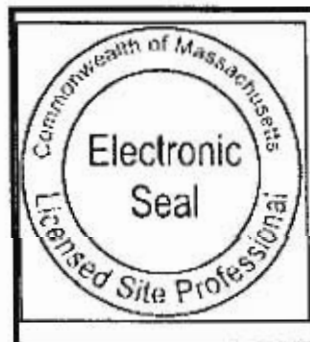
5. Ext.:

6. FAX:

7. Signature: **RICHARD P STANDISH**

8. Date: **10/04/2007**
(mm/dd/yyyy)

9. LSP Stamp:





Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC106

RELEASE ABATEMENT MEASURE (RAM)
TRANSMITTAL FORM

Release Tracking Number

3 - 362

Pursuant to 310 CMR 40.0444 - 0446 (Subpart D)

F. PERSON UNDERTAKING RAM:

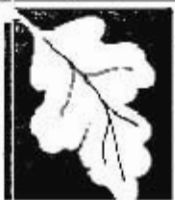
1. Check all that apply: ☐ a. change in contact name ☐ b. change of address ☐ c. change in the person undertaking response actions
2. Name of Organization: **MASS ELECTRIC CO DBA NATIONAL GRID**
3. Contact First Name: **MICHELE** 4. Last Name: **LEONE**
5. Street: **25 RESEARCH DRIVE** 6. Title: **SR ENVMTL ENG**
7. City/Town: **WESTBOROUGH** 8. State: **MA** 9. ZIP Code: **01582-0000**
10. Telephone: **5083894296** 11. Ext.: _____ 12. FAX: _____

G. RELATIONSHIP TO RELEASE OR THREAT OF RELEASE OF PERSON UNDERTAKING RAM:

- ☒ 1. RP or PRP ☐ a. Owner ☐ b. Operator ☐ c. Generator ☐ d. Transporter
- ☒ e. Other RP or FRP Specify: **OTHER PRPS**
- ☐ 2. Fiduciary, Secured Lender or Municipality with Exempt Status (as defined by M.G.L. c. 21E, s. 2)
- ☐ 3. Agency or Public Utility on a Right of Way (as defined by M.G.L. c. 21E, s. 5(j))
- ☐ 4. Any Other Person Undertaking RAM Specify Relationship: _____

H. REQUIRED ATTACHMENT AND SUBMITTALS:

- ☐ 1. Check here if any Remediation Waste, generated as a result of this RAM, will be stored, treated, managed, recycled or reused at the site following submission of the RAM Completion Statement. You must submit a Phase IV Remedy Implementation Plan along with the appropriate transmittal form (BWSC108).
- ☒ 2. Check here if the Response Action(s) on which this opinion is based, if any, are (were) subject to any order(s), permit(s) and/or approval(s) issued by DEP or EPA. If the box is checked, you MUST attach a statement identifying the applicable provisions thereof.
- ☒ 3. Check here to certify that the Chief Municipal Officer and the Local Board of Health have been notified of the implementation of a Release Abatement Measure.
- ☒ 4. Check here if any non-updatable information provided on this form is incorrect, e.g. Release Address/Location Aid. Send corrections to the DEP Regional Office.
- ☐ 5. If a RAM Compliance Fee is required for this RAM, check here to certify that a RAM Compliance Fee was submitted to DEP, P. O. Box 4062, Boston, MA 02211.
- ☒ 6. Check here to certify that the LSP Opinion containing the material facts, data, and other information is attached.



Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

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RELEASE ABATEMENT MEASURE (RAM)
TRANSMITTAL FORM

Release Tracking Number

3 - 362

Pursuant to 310 CMR 40.0444 - 0446 (Subpart D)

I. CERTIFICATION OF PERSON UNDERTAKING RAM:

1. I, **MICHELE LEONE**, attest under the pains and penalties of perjury (i) that I have personally examined and am familiar with the information contained in this submittal, including any and all documents accompanying this transmittal form, (ii) that, based on my inquiry of those individuals immediately responsible for obtaining the information, the material information contained in this submittal is, to the best of my knowledge and belief, true, accurate and complete, and (iii) that I am fully authorized to make this attestation on behalf of the entity legally responsible for this submittal. I/the person or entity on whose behalf this submittal is made am/is aware that there are significant penalties, including, but not limited to, possible fines and imprisonment, for willfully submitting false, inaccurate, or incomplete information.

2. By: **MICHELE LEONE**

Signature

3. Title: **SR ENVMTL ENG**

4. For: **MASS ELECTRIC CO DBA NATIONAL GRID**

(Name of person or entity recorded in Section F)

5. Date: **10/04/2007**

(mm/dd/yyyy)

☐ 6. Check here if the address of the person providing certification is different from address recorded in Section F.

7. Street: _____

8. City/Town: _____ 9. State: _____ 10. ZIP Code: _____

11. Telephone: _____ 12. Ext.: _____ 13. FAX: _____

YOU ARE SUBJECT TO AN ANNUAL COMPLIANCE ASSURANCE FEE OF UP TO \$10,000 PER BILLABLE YEAR FOR THIS DISPOSAL SITE. YOU MUST LEGIBLY COMPLETE ALL RELEVANT SECTIONS OF THIS FORM OR DEP MAY RETURN THE DOCUMENT AS INCOMPLETE. IF YOU SUBMIT AN INCOMPLETE FORM, YOU MAY BE PENALIZED FOR MISSING A REQUIRED DEADLINE.

Date Stamp (DEP USE ONLY:)

Received by DEP on

10/4/2007 5:06:29 PM



RAM REMEDIAL MONITORING REPORT

Pursuant to 310 CMR 40.0400 (SUBPART D)

Release Tracking Number

3 - 362

Remedial System or Monitoring Program: 1 of 1

A. DESCRIPTION OF ACTIVE REMEDIAL SYSTEM OR ACTIVE REMEDIAL MONITORING PROGRAM:

1. Type of Active Remedial System or Active Remedial Monitoring Program: (check all that apply)

☒ a. Active Remedial System: (check all that apply)

- ☐ i. NAPL Recovery ☐ ii. Soil Vapor Extraction/Bioventing ☐ iii. Vapor-phase Carbon Adsorption
☐ iv. Groundwater Recovery ☐ v. Dual/Multi-phase Extraction ☐ vi. Aqueous-phase Carbon Adsorption
☐ vii. Air Stripping ☐ viii. Sparging/Biosparging ☐ ix. Cat/Thermal Oxidation
☒ x. Other Describe: SUB-SLAB VENTILATION/DEPRESSURIZATION SYSTEM

☐ b. Application of Remedial Additives: (check all that apply)

- ☐ i. To the Subsurface ☐ ii. To Groundwater (Injection) ☐ iii. To the Surface

☐ c. Active Remedial Monitoring Program Without the Application of Remedial Additives: (check all that apply; Sections C, D and E are not required; attach supporting information, data, maps and/or sketches needed by checking Section F5)

- ☐ i. Reactive Wall ☐ ii. Natural Attenuation ☐ iii. Other Describe: _____

2. Mode of Operation: (check one)

- ☒ a. Continuous ☐ b. Intermittent ☐ c. Pulsed ☐ d. One-time Event Only ☐ e. Other: _____

3. System Effluent/Discharge: (check all that apply)

- ☐ a. Sanitary Sewer/POTW
☐ b. Groundwater Re-infiltration/Re-injection: (check one) ☐ i. Downgradient ☐ ii. Upgradient
☒ c. Vapor-phase Discharge to Ambient Air: (check one) ☒ i. Off-gas Controls ☐ ii. No Off-gas Controls
☐ d. Drinking Water Supply
☐ e. Surface Water (including Storm Drains)
☐ f. Other Describe: _____

B. MONITORING FREQUENCY:

1. Reporting period that is the subject of this submittal: From: 3/22/2007 To: 9/10/2007
(mm/dd/yyyy) (mm/dd/yyyy)

2. Number of monitoring events during the reporting period: (check one)

- ☐ a. System Startup: (if applicable)
☐ i. Days 1, 3, 6, and then weekly thereafter, for the first month.
☐ ii. Other Describe: _____
☒ b. Post-system Startup (after first month) or Monitoring Program:
☒ i. Monthly
☐ ii. Quarterly
☐ iii. Other Describe: _____

☒ 3. Check here to certify that the number of required monitoring events were conducted during the reporting period.

C. EFFLUENT/DISCHARGE REGULATION: (check one to indicate how the effluent/discharge limits were established)

- ☐ 1. NPDES: (check one) ☐ a. Remediation General Permit ☐ b. Individual Permit
☐ c. Emergency Exclusion Effective Date of Permit: (mm/dd/yyyy)

2. MCP Performance Standard MCP Citations(s): _____

☒ 3. DEP Approval Letter Date of Letter: 6/9/1999
(mm/dd/yyyy)

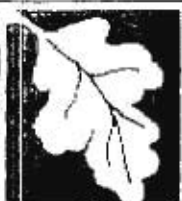
4. Other Describe: _____

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OCT 09 2007

DEP

REGIONAL OFFICE



Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC106A

RAM REMEDIAL MONITORING REPORT

Pursuant to 310 CMR 40.0400 (SUBPART D)

Remedial System or Monitoring Program: 1

of: 1

Release Tracking Number

3 - 362

D. WASTEWATER TREATMENT PLANT OPERATOR: (check one)

1. Required due to Remedial Wastewater Treatment Plant in place for more than 30 days.

a. Name: _____ b. Grade: _____

c. License No.: _____ d. License Exp. Date: _____
(mm/dd/yyyy)

2. Not Required

☒ 3. Not Applicable

E. STATUS OF ACTIVE REMEDIAL SYSTEM OR ACTIVE REMEDIAL MONITORING PROGRAM DURING REPORTING PERIOD:

(check all that apply)

☒ 1. The Active Remedial System was functional one or more days during the Reporting Period.

a. Days System was Fully Functional: 162

b. GW Recovered (gals): _____

c. NAPL Recovered (gals): _____

d. GW Discharged (gals): _____

e. Avg. Soil Gas Recovery Rate (scfm): 37.50

f. Avg. Sparging Rate (scfm): _____

2. Remedial Additives: (check all that apply)

☐ a. No Remedial Additives applied during the Reporting Period.

☐ b. Enhanced Bioremediation Additives applied: (total quantity applied at the site for the current reporting period)

i. Nitrogen/Phosphorus:

Name of Additive	Date	Quantity	Units

ii. Peroxides:

Name of Additive	Date	Quantity	Units

iii. Microorganisms:

Name of Additive	Date	Quantity	Units

iv. Other:

Name of Additive	Date	Quantity	Units

☐ c. Chemical oxidation/reduction additives applied: (total quantity applied at the site for the current reporting period)

i. Permanganates:

Name of Additive	Date	Quantity	Units

ii. Peroxides:

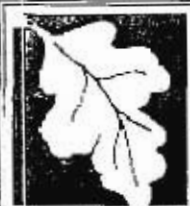
Name of Additive	Date	Quantity	Units

iii. Persulfates:

Name of Additive	Date	Quantity	Units

iv. Other:

Name of Additive	Date	Quantity	Units



Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC106A

RAM REMEDIAL MONITORING REPORT

Pursuant to 310 CMR 40.0400 (SUBPART D)

Release Tracking Number

3 - 362

Remedial System or Monitoring Program: 1 of 1

E. STATUS OF ACTIVE REMEDIAL SYSTEM OR ACTIVE REMEDIAL MONITORING PROGRAM DURING REPORTING PERIOD: (cont.)
(check all that apply)

d. Other additives applied: (total quantity applied at the site for the current reporting period)

Name of Additive	Date	Quantity	Units

Name of Additive	Date	Quantity	Units

e. Check here if any additional Remedial Additives were applied. Attach list of additional additives and include Name of Additive, Date Applied, Quantity Applied and Units (in gals. or lbs.)

F. SHUTDOWNS OF ACTIVE REMEDIAL SYSTEM OR ACTIVE REMEDIAL MONITORING PROGRAM: (check all that apply)

☒ 1. The Active Remedial System had unscheduled shutdowns on one or more occasions during the Reporting Period.

a. Number of Unscheduled Shutdowns: 12 b. Total Number of Days of Unscheduled Shutdowns: 10

c. Reason(s) for Unscheduled Shutdowns: SYSTEM OVERHEATING DUE TO MOTOR PROBLEMS

☒ 2. The Active Remedial System had scheduled shutdowns on one or more occasions during the Reporting Period.

a. Number of Scheduled Shutdowns: 1 b. Total Number of Days of Scheduled Shutdowns: 0

c. Reason(s) for Scheduled Shutdowns: ELECTRICAL MAINTANANCE

☐ 3. The Active Remedial System or Active Remedial Monitoring Program was permanently shutdown/discontinued during the Reporting Period.

a. Date of Final System or Monitoring Program Shutdown: (mm/dd/yyyy)

☐ b. No Further Effluent Discharges.

☐ c. No Further Application of Remedial Additives planned; sufficient monitoring completed to demonstrate compliance with 310 CMR 40.0046.

☐ d. No Further Submittals Planned.

☐ e. Other: Describe:

G. SUMMARY STATEMENTS: (check all that apply for the current reporting period)

☒ 1. All Active Remedial System checks and effluent analyses required by the approved plan and/or permit were performed when applicable.

☒ 2. There were no significant problems or prolonged (>25% of reporting period) unscheduled shutdowns of the Active Remedial System.

☒ 3. The Active Remedial System or Active Remedial Monitoring Program operated in conformance with the MCP, and all applicable approval conditions and/or permits.

4. Indicate any Operational Problems or Notes:

☒ 5. Check here if additional/supporting information, data, maps, and/or sketches are attached to the form.



RAM REMEDIAL MONITORING REPORT EFFLUENT/DISCHARGE CONCENTRATIONS

Pursuant to 310 CMR 40.0400 (SUBPART D)

Remedial System or Monitoring Program: 1 of 1

BWSC106 B

Release Tracking Number

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For each Point of Measurement, indicate the highest concentration detected during the reporting period, of each oil, hazardous material and/or remedial additive.

[illegible]

Check here if an additional BWS106B, Effluent/Discharge Concentrations Form, is needed.

Revised: 2/9/2005

Attachment H

Section H – LSP Opinion

Release Abatement Measure (RAM) Status Report No. 19
Former Manufactured Gas Plant (MGP) Site
Parcel B, 129 Commercial Street
Malden, Massachusetts
RTN 3-0362 and Linked RTN 3-3757
Tier 1B Permit 7378

SECTION H(2): Orders, Permits, or Approvals on which the Response Actions are based

The Response Action(s) on which this opinion is based is subject to the following approvals:

- Written approval of the associated RAM Plan was issued by DEP on 24 September 1998.
- Written conditional approval of the 9 April 1999 RAM Plan modification was issued by DEP on 9 June 1999.
- An Amendment of Conditional Approval was issued by DEP on 27 July 1999.

TABLE II
SUB-SLAB VENTING SYSTEM VAPOR ANALYTICAL DATA¹
129 COMMERCIAL STREET, PARCEL B OF FORMER MANUFACTURED GAS PLANT SITE
MALDEN, MASSACHUSETTS

Shut valve on 19 January 2000													
INFLUENT		Day 1	Day 3	Day 7	Day 14	Day 28	2 Months	Day 70	3 Months	4 Months	4.5 Months	5 Months	5.5 Months
Sample Date	PID Reading (ppm)	16-Nov-99	19-Nov-99	23-Nov-99	30-Nov-99	14-Dec-99	10-Jan-00	25-Jan-00	15-Feb-00	14-Mar-00	29-Mar-00	26-Apr-00	1-May-00
		175	63	60	10.5	2	0.2	195	82	61	38	1.6	19
Compound (ug/L)													
Benzene		348	88	127	19	19	ND	402	192	148	72	47	26
Toluene		45	23	36	7	11	ND	200	173	326	89	103	53
Ethylbenzene		32	15	22	4	5	ND	77	56	77	29	29	23
M&P Xylene		18	11	17	3	5	ND	76	70	282	48	120	42
O Xylene		2	ND	3	ND	ND	ND	14	17	36	14	67	18
Naphthalene		ND	NA	NA	150	ND	NA	NA	NA	NA	NA	NA	NA
Styrene		ND	ND	5	ND	ND	2	13	12	29	10	48	6
Total VOCs		445	137	210	183	40	2	782	520	974	262	420	168
Shut valve on 19 January 2000													
EFFLUENT - 1		Day 1	Day 3	Day 7	Day 14	Day 28	2 Months	Day 70	3 Months	4 Months	4.5 Months	5 Months	5.5 Months
Sample Date	PID Reading (ppm)	16-Nov-99	19-Nov-99	23-Nov-99	30-Nov-99	14-Dec-99	10-Jan-00	25-Jan-00	15-Feb-00	14-Mar-00	29-Mar-00	26-Apr-00	1-May-00
		0	0	11	4.1	0	0.2	0	0.8	4	0	0.4	0
Compound (ug/L)													
Benzene		ND	ND	33	14	ND	ND	ND	ND	56	ND	ND	ND
Toluene		ND	ND	ND	ND	ND	ND	ND	5	ND	ND	11	ND
Ethylbenzene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
M&P Xylene		ND	ND	ND	ND	ND	ND	ND	4	ND	ND	41	ND
O Xylene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	26	ND
Naphthalene		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Styrene		ND	ND	ND	4	ND	ND	ND	ND	16	ND	15	ND
Total VOCs		0	0	33	18	0	0	0	9	72	ND	93	0
Shut valve on 19 January 2000													
EFFLUENT - 2		Day 1	Day 3	Day 7	Day 14	Day 28	2 Months	Day 70	3 Months	4 Months	4.5 Months	5 Months	5.5 Months
Sample Date	PID Reading (ppm)	16-Nov-99	19-Nov-99	23-Nov-99	30-Nov-99	14-Dec-99	10-Jan-00	25-Jan-00	15-Feb-00	14-Mar-00	29-Mar-00	26-Apr-00	1-May-00
		0	0	0	0	0	0	0	0	0	0	0	0
Compound (ug/L)													
Benzene		ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene		ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene		ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
M&P Xylene		ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	14	ND
O Xylene		ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	9	ND
Naphthalene		2	NA	2	ND	ND	ND	11	ND	36	ND	NA	NA
Styrene		2	NA	2	ND	ND	ND	11	ND	36	ND	6	ND
Total VOCs		2	NA	2	0	0	0	11	0	36	ND	29	0

See last page for Notes & Abbreviations.

TABLE II
SUB-SLAB VENTING SYSTEM VAPOR ANALYTICAL DATA¹
128 COMMERCIAL STREET, PARCEL B OF FORMER MANUFACTURED GAS PLANT SITE
MALDEN, MASSACHUSETTS

Opened valve on 2 October 2000												
INFLUENT	6 Months 24-May-00	7 Months 23-Jun-00	8 Months 31-Jul-00	9 Months 29-Aug-00	10 Months 27-Sep-00	11 Months 31-Oct-00	12 Months 28-Nov-00	13 Months 31-Dec-00	14 Months 22-Jan-01	15 Months 27-Feb-01	16 Months 26-Mar-01	17 Months 30-Apr-01
Sampling Increment	9.4	4.2	1.9	0.6	0.4	0	0	0	0	0	0	0
Sample Date												
PID Reading (ppm)												
Compound (ug/L)												
Benzene	13	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	50	20	7	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	15	6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
M&P Xylene	27	18	5	18	ND	ND	ND	ND	ND	ND	ND	ND
O Xylene	8	7	ND	2	ND	ND	3	ND	ND	ND	ND	ND
Naphthalene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Styrene	ND	ND	3	ND	ND	2	4	3	ND	ND	ND	5
Total VOCs	113	51	15	20	0	2	9	3	0	0	0	5
Opened valve on 2 October 2000												
EFFLUENT - 1	6 Months 24-May-00	7 Months 23-Jun-00	8 Months 31-Jul-00	9 Months 29-Aug-00	10 Months 27-Sep-00	11 Months 31-Oct-00	12 Months 28-Nov-00	13 Months 31-Dec-00	14 Months 22-Jan-01	15 Months 27-Feb-01	16 Months 26-Mar-01	17 Months 30-Apr-01
Sampling Increment	4.5	3.3	1.2	0.8	0	0	0	0	0	0	0	0
Sample Date												
PID Reading (ppm)												
Compound (ug/L)												
Benzene	28	8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	ND	11	13	10	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
M&P Xylene	ND	ND	ND	ND	3	ND	ND	ND	ND	ND	ND	ND
O Xylene	ND	ND	ND	11	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Styrene	ND	ND	ND	ND	ND	5	11	4	ND	ND	ND	ND
Total VOCs	28	19	13	21	3	5	11	4	0	0	0	0
Opened valve on 2 October 2000												
EFFLUENT - 2	6 Months 24-May-00	7 Months 23-Jun-00	8 Months 31-Jul-00	9 Months 29-Aug-00	10 Months 27-Sep-00	11 Months 31-Oct-00	12 Months 28-Nov-00	13 Months 31-Dec-00	14 Months 22-Jan-01	15 Months 27-Feb-01	16 Months 26-Mar-01	17 Months 30-Apr-01
Sampling Increment	0	0	0	0	0	0	0	0	0	0	0	0
Sample Date												
PID Reading (ppm)												
Compound (ug/L)												
Benzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
M&P Xylene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
O Xylene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Styrene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total VOCs	0	0	0	0	0	0	0	0	0	0	0	0

See last page for Notes & Abbreviations.

TABLE II
SUB-SLAB VENTING SYSTEM VAPOR ANALYTICAL DATA
129 COMMERCIAL STREET, PARCEL B OF FORMER MANUFACTURED GAS PLANT SITE
MALDEN, MASSACHUSETTS

INFLUENT		18 Months	19 Months	20 Months	21 Months	22 Months	23 Months	24 Months	25 Months	26 Months	27 Months	28 Months	29 Months
Sampling Increment	Sample Date	31-May-01	27-Jun-01	27-Jul-01	31-Aug-01	30-Sep-01	29-Oct-01	30-Nov-01	19-Dec-01	31-Jan-02	27-Feb-02	28-Mar-02	2-May-02
PID Reading (ppm)		0	0	0	0	0	0	0	0	0	0	0	0
Compound (ug/L)													
Benzene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
M&P Xylene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
O Xylene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene		6	3	ND	1	3	ND	4	ND	NA	NA	NA	NA
Styrene		6	3	0	1	3	0	4	0	0	0	0	0
Total VOCs		6	3	0	1	3	0	4	0	0	0	0	0
EFFLUENT - 1		18 Months	19 Months	20 Months	21 Months	22 Months	23 Months	24 Months	25 Months	26 Months	27 Months	28 Months	29 Months
Sampling Increment	Sample Date	31-May-01	27-Jun-01	27-Jul-01	31-Aug-01	30-Sep-01	29-Oct-01	30-Nov-01	19-Dec-01	31-Jan-02	27-Feb-02	28-Mar-02	2-May-02
PID Reading (ppm)		0	1.2	0.8	0	0	0	0	0	0	0	0	0
Compound (ug/L)													
Benzene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
M&P Xylene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
O Xylene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Styrene		ND	ND	ND	ND	2	ND	ND	1	ND	ND	ND	ND
Total VOCs		0	0	0	0	2	0	0	1	0	0	0	0
EFFLUENT - 2		18 Months	19 Months	20 Months	21 Months	22 Months	23 Months	24 Months	25 Months	26 Months	27 Months	28 Months	29 Months
Sampling Increment	Sample Date	31-May-01	27-Jun-01	27-Jul-01	31-Aug-01	30-Sep-01	29-Oct-01	30-Nov-01	19-Dec-01	31-Jan-02	27-Feb-02	28-Mar-02	2-May-02
PID Reading (ppm)		0	0	0	0	0	0	0	0	0	0	0	0
Compound (ug/L)													
Benzene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
M&P Xylene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
O Xylene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Styrene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total VOCs		0	0	0	0	0	0	0	0	0	0	0	0

See last page for Notes & Abbreviations.

TABLE II
SUB-SLAB VENTING SYSTEM VAPOR ANALYTICAL DATA¹
129 COMMERCIAL STREET, PARCEL B OF FORMER MANUFACTURED GAS PLANT SITE
MALDEN, MASSACHUSETTS

INFLUENT		30 Months 5-Jun-02	31 Months 27-Jun-02	32 Months 30-Jul-02	33 Months 27-Aug-02	34 Months 25-Sep-02	35 Months 28-Oct-02	36 Months 24-Nov-02	37 Months 31-Dec-02	38 Months 29-Jan-03	39 Months 21-Feb-03	40 Months 31-Mar-03	41 Months 28-Apr-03
Sampling Increment		0	0	0	0	0	0	0	0	0	0	0	0
Sample Date		0	0	0	0	0	0	0	0	0	0	0	0
PID Reading (ppm)		0	0	0	0	0	0	0	0	0	0	0	0
Compound (ug/L)													
Benzene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
M&P Xylene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4
O Xylene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Styrene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7
Total VOCs		0	0	0	0	0	0	0	0	0	0	0	11
EFFLUENT - 1		30 Months 5-Jun-02	31 Months 27-Jun-02	32 Months 30-Jul-02	33 Months 27-Aug-02	34 Months 25-Sep-02	35 Months 28-Oct-02	36 Months 24-Nov-02	37 Months 31-Dec-02	38 Months 29-Jan-03	39 Months 21-Feb-03	40 Months 31-Mar-03	41 Months 28-Apr-03
Sampling Increment		0	0	0	0	0	0	0	0	0	0	0	0
Sample Date		0	0	0	0	0	0	0	0	0	0	0	0
PID Reading (ppm)		0	0	0	0	0	0	0	0	0	0	0	0
Compound (ug/L)													
Benzene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
M&P Xylene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
O Xylene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Styrene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total VOCs		0	0	0	0	0	0	0	5	0	0	0	0
EFFLUENT - 2		30 Months 5-Jun-02	31 Months 27-Jun-02	32 Months 30-Jul-02	33 Months 27-Aug-02	34 Months 25-Sep-02	35 Months 28-Oct-02	36 Months 24-Nov-02	37 Months 31-Dec-02	38 Months 29-Jan-03	39 Months 21-Feb-03	40 Months 31-Mar-03	41 Months 28-Apr-03
Sampling Increment		0	0	0	0	0	0	0	0	0	0	0	0
Sample Date		0	0	0	0	0	0	0	0	0	0	0	0
PID Reading (ppm)		0	0	0	0	0	0	0	0	0	0	0	0
Compound (ug/L)													
Benzene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
M&P Xylene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
O Xylene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene		3	ND	NA	NA	NA	NA	NA	NA	1	ND	ND	ND
Styrene		3	0	0	5	0	0	0	5	1	0	0	0
Total VOCs		3	0	0	5	0	0	0	5	1	0	0	0

See last page for Notes & Abbreviations.

TABLE II
SUB-SLAB VENTING SYSTEM VAPOR ANALYTICAL DATA¹
129 COMMERCIAL STREET, PARCEL B OF FORMER MANUFACTURED GAS PLANT SITE
MALDEN, MASSACHUSETTS

INFLUENT		42 Months	43 Months	44 Months	45 Months	46 Months	47 Months	48 Months	49 Months	50 Months	51 Months	52 Months	53 Months
Sample Date	PID Reading (ppm)	29-May-03	30-Jun-03	31-Jul-03	22-Aug-03	30-Sep-03	28-Oct-04	30-Nov-04	18-Dec-04	22-Jan-04	14-Feb-04	31-Mar-04	28-Apr-04
Compound (ug/L)													
Benzene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
M&P Xylene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
O Xylene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Styrene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total VOCs		0	5	0	0	0	0	0	0	0	0	0	0
EFFLUENT - 1		42 Months	43 Months	44 Months	45 Months	46 Months	47 Months	48 Months	49 Months	50 Months	51 Months	52 Months	53 Months
Sample Date	PID Reading (ppm)	29-May-03	30-Jun-03	31-Jul-03	22-Aug-03	30-Sep-03	28-Oct-04	30-Nov-04	18-Dec-04	22-Jan-04	14-Feb-04	31-Mar-04	28-Apr-04
Compound (ug/L)													
Benzene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
M&P Xylene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
O Xylene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Styrene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	14
Total VOCs		0	0	0	0	0	0	0	0	0	0	0	14
EFFLUENT - 2		42 Months	43 Months	44 Months	45 Months	46 Months	47 Months	48 Months	49 Months	50 Months	51 Months	52 Months	53 Months
Sample Date	PID Reading (ppm)	29-May-03	30-Jun-03	31-Jul-03	22-Aug-03	30-Sep-03	28-Oct-04	30-Nov-04	18-Dec-04	22-Jan-04	14-Feb-04	31-Mar-04	28-Apr-04
Compound (ug/L)													
Benzene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
M&P Xylene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
O Xylene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Styrene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total VOCs		0	0	0	0	0	0	0	0	0	0	0	0

See last page for Notes & Abbreviations.

TABLE II
SUB-SLAB VENTING SYSTEM VAPOR ANALYTICAL DATA
129 COMMERCIAL STREET, PARCEL B OF FORMER MANUFACTURED GAS PLANT SITE
MALDEN, MASSACHUSETTS

INFLUENT		54 Months	55 Months	56 Months	57 Months	58 Months	59 Months	60 Months	61 Months	62 Months	63 Months	64 Months	65 Months
Sampling Increment		28-May-04	29-Jun-04	30-Jul-04	31-Aug-04	14-Sep-04	27-Oct-04	30-Nov-04	20-Dec-04	25-Jan-05	28-Feb-05	21-Mar-05	26-Apr-05
Sample Date		0	0	0	0	0	0	0	0	0	0	0	0
PID Reading (ppm)													
Compound (ug/L)													
Benzene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
M&P Xylene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
O Xylene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Styrene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total VOCs		0	0	0	0	0	0	0	0	0	0	0	0

EFFLUENT - 1		54 Months	55 Months	56 Months	57 Months	58 Months	59 Months	60 Months	61 Months	62 Months	63 Months	64 Months	65 Months
Sampling Increment		28-May-04	29-Jun-04	30-Jul-04	31-Aug-04	14-Sep-04	27-Oct-04	30-Nov-04	20-Dec-04	25-Jan-05	28-Feb-05	21-Mar-05	26-Apr-05
Sample Date		0	0	0	0	0	0	0	0	0	0	0	0
PID Reading (ppm)													
Compound (ug/L)													
Benzene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
M&P Xylene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
O Xylene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Styrene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total VOCs		0	0	0	0	0	0	0	0	0	0	0	0

EFFLUENT - 2		54 Months	55 Months	56 Months	57 Months	58 Months	59 Months	60 Months	61 Months	62 Months	63 Months	64 Months	65 Months
Sampling Increment		28-May-04	29-Jun-04	30-Jul-04	31-Aug-04	14-Sep-04	27-Oct-04	30-Nov-04	20-Dec-04	25-Jan-05	28-Feb-05	21-Mar-05	26-Apr-05
Sample Date		0	0	0	0	0	0	0	0	0	0	0	0
PID Reading (ppm)													
Compound (ug/L)													
Benzene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
M&P Xylene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
O Xylene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Styrene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total VOCs		0	0	0	0	0	0	0	0	0	0	0	0

See last page for Notes & Abbreviations.

TABLE II
SUB-SLAB VENTING SYSTEM VAPOR ANALYTICAL DATA
129 COMMERCIAL STREET, PARCEL B OF FORMER MANUFACTURED GAS PLANT SITE
MALDEN, MASSACHUSETTS

INFLUENT		66 Months	67 Months	68 Months	69 Months	70 Months	71 Months	72 Months	73 Months	74 Months	75 Months	76 Months	77 Months
Sampling Increment	Sample Date	31-May-05	28-Jun-05	21-Jul-05	31-Aug-05	26-Sep-05	31-Oct-05	30-Nov-05	29-Dec-05	24-Jan-06	27-Feb-06	31-Mar-06	25-Apr-06
PID Reading (ppm)		0	0	0	0	0	0	0	0	0	0	0	0
Compound (ug/L)													
Benzene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
M&P Xylene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
O Xylene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Styrene		ND	8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total VOCs		0	8	0	0	0	0	0	0	0	0	0	0

EFFLUENT - 1		66 Months	67 Months	68 Months	69 Months	70 Months	71 Months	72 Months	73 Months	74 Months	75 Months	76 Months	77 Months
Sampling Increment	Sample Date	31-May-05	28-Jun-05	21-Jul-05	31-Aug-05	26-Sep-05	31-Oct-05	30-Nov-05	29-Dec-05	24-Jan-06	27-Feb-06	31-Mar-06	25-Apr-06
PID Reading (ppm)		0	0	0	0	0	0	0	0	0	0	0	0
Compound (ug/L)													
Benzene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
M&P Xylene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
O Xylene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Styrene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total VOCs		0	0	0	0	0	0	0	0	0	0	0	0

EFFLUENT - 2		66 Months	67 Months	68 Months	69 Months	70 Months	71 Months	72 Months	73 Months	74 Months	75 Months	76 Months	77 Months
Sampling Increment	Sample Date	31-May-05	28-Jun-05	21-Jul-05	31-Aug-05	26-Sep-05	31-Oct-05	30-Nov-05	29-Dec-05	24-Jan-06	27-Feb-06	31-Mar-06	25-Apr-06
PID Reading (ppm)		0	0	0	0	0	0	0	0	0	0	0	0
Compound (ug/L)													
Benzene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
M&P Xylene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
O Xylene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Styrene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total VOCs		0	0	0	0	0	0	0	0	0	0	0	0

See last page for Notes & Abbreviations.

TABLE II
SUB-SLAB VENTING SYSTEM VAPOR ANALYTICAL DATA¹
129 COMMERCIAL STREET, PARCEL B OF FORMER MANUFACTURED GAS PLANT SITE
MALDEN, MASSACHUSETTS

INFLUENT		78 Months	79 Months	80 Months	81 Months	82 Months	83 Months	84 Months	85 Months	86 Months	87 Months	88 Months	89 Months
Sampling Increment		31-May-06	28-Jun-06	28-Jul-06	31-Aug-06	26-Sep-06	30-Oct-06	29-Nov-06	19-Dec-06	25-Jan-07	28-Feb-07	14-Mar-07	27-Apr-07
PID Reading (ppm)		0	0	0	0	0	0	0	0	0	0	0	0
Compound (ug/L)													
Benzene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
m,p-Xylene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
O-Xylene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Styrene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total VOCs		0	0	0	0	0	0	0	0	0	0	0	0
EFFLUENT - 1		78 Months	79 Months	80 Months	81 Months	82 Months	83 Months	84 Months	85 Months	86 Months	87 Months	88 Months	89 Months
Sampling Increment		31-May-06	28-Jun-06	28-Jul-06	31-Aug-06	26-Sep-06	30-Oct-06	29-Nov-06	19-Dec-06	25-Jan-07	28-Feb-07	14-Mar-07	27-Apr-07
PID Reading (ppm)		0	0	0	0	0	0	0	0	0	0	0	0
Compound (ug/L)													
Benzene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
m,p-Xylene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
O-Xylene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Styrene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total VOCs		0	0	0	0	0	0	0	0	0	0	0	0
EFFLUENT - 2		78 Months	79 Months	80 Months	81 Months	82 Months	83 Months	84 Months	85 Months	86 Months	87 Months	88 Months	89 Months
Sampling Increment		31-May-06	28-Jun-06	28-Jul-06	31-Aug-06	26-Sep-06	30-Oct-06	29-Nov-06	19-Dec-06	25-Jan-07	28-Feb-07	14-Mar-07	27-Apr-07
PID Reading (ppm)		0	0	0	0	0	0	0	0	0	0	0	0
Compound (ug/L)													
Benzene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
m,p-Xylene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
O-Xylene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Styrene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total VOCs		0	0	0	0	0	0	0	0	0	0	0	0

See last page for Notes & Abbreviations.

INFLUENT		90 Months	91 Months	92 Months	93 Months
Sampling Increment	Sample Date	31-May-07	27-Jun-07	31-Jul-07	30-Aug-07
PID Reading (ppm)		0	0	0	0
Compound (ug/L)					
Benzene		ND	ND	ND	ND
Toluene		ND	ND	ND	ND
Ethylbenzene		ND	ND	ND	ND
o-Xylene		ND	ND	ND	ND
m-Xylene		ND	ND	ND	ND
p-Xylene		ND	ND	ND	ND
Naphthalene		NA	NA	NA	NA
Styrene		ND	ND	ND	ND
Total VOCs		0	0	0	0

EFFLUENT - 1		90 Months	91 Months	92 Months	93 Months
Sampling Increment	Sample Date	30-May-07	27-Jun-07	31-Jul-07	31-Aug-07
PID Reading (ppm)		0	0	0	0
Compound (ug/L)					
Benzene		ND	ND	ND	ND
Toluene		ND	ND	ND	ND
Ethylbenzene		ND	ND	ND	ND
M&P Xylene		ND	ND	ND	ND
O Xylene		ND	ND	ND	ND
Naphthalene		NA	NA	NA	NA
Styrene		ND	ND	ND	ND
Total VOCs		0	0	0	0

EFFLUENT - 2				
Sampling Increment	90 Months 30-May-07	91 Months 27-Jun-07	92 Months 31-Jul-07	93 Months 31-Aug-07
Sample Date	0	0	0	0
PID Reading (ppm)				
Compound (ug/L)				
Benzene	ND	ND	ND	ND
Toluene	ND	ND	ND	ND
Ethylbenzene	ND	ND	ND	ND
m&p Xylene	ND	ND	ND	ND
O Xylene	ND	ND	ND	ND
Naphthalene	NA	NA	NA	NA
Styrene	ND	ND	ND	ND
Total VOCs	0	0	0	0

See last page for Notes & Abbreviations.

TABLE III
SUB-SLAB VENTING SYSTEM MONITORING DATA
129 COMMERCIAL STREET, PARCEL B OF FORMER MANUFACTURED GAS PLANT SITE
MALDEN, MASSACHUSETTS

Monitoring Date	Time	Influent Total VOC Concentrations		Effluent Total VOC Concentrations		Outdoor Ambient Air Temp. (°F)	Outlet Vapor Temp. (°F)	Flow Velocity (ft./min)		System Vacuum (in. water)		Vacuum at Extraction Points (in. water)						
		PID (ppm)	H&A GC ¹ (ug/L)	Effluent - 1 (ppm)	Effluent - 2 (ppm)			Influent	Effluent	Blower	Knockout Drum	Discharge	EP-1	EP-2	EP-3	EP-4	EP-5	
16-Nov-99	4:40	0.0	-	0.0	0.0	-	-	0	0	0	0	0	0	0	0	0	0	0
16-Nov-99	5:47	82.4	445.0	5.0	5.0	-	82	750	1600	7.5	0	40	0	0	0	0	0	0
16-Nov-99	17:00	129.0	-	0.0	0.0	-	100.5	750	1600	7.75	1	40	-	-	-	-	-	-
17-Nov-99	7:00	422.0	-	0.0	0.0	-	99	390	1450	8	1	40	-	-	-	-	-	-
17-Nov-99	18:30	122.0	-	0.0	0.0	-	102	390	1450	8.5	1	40.5	-	-	-	-	-	-
18-Nov-99	7:05	128.0	-	0.0	0.0	-	101	390	1450	8	1	41	-	-	-	-	-	-
18-Nov-99	17:35	105.0	-	0.0	0.0	-	112	390	1450	8.5	1.5	40	0.4	0	0	0	0	0
19-Nov-99	7:10	69.0	137.0	0.0	0.0	-	111	390	1450	8	1.5	41	-	-	-	-	-	-
19-Nov-99	17:05	44.4	-	17.1	0.0	57	121	390	1450	8.5	1.5	40	-	-	-	-	-	-
20-Nov-99	14:07	27.8	-	84.3	0.0	65	132	390	1450	8.5	3	40	-	-	-	-	-	-
21-Nov-99	8:15	22.5	-	42.8	0.0	55	120	390	1450	8	2.9	40	2	2	0	0	2	2
22-Nov-99	6:20	25.7	-	0.0	0.0	55	121	390	1450	8.5	2.5	40	-	-	-	-	-	-
23-Nov-99	7:50	67.5	210.0	17.2	0.0	65	121.5	390	1450	8.5	2.8	40.5	-	-	-	-	-	-
24-Nov-99	4:15	45.0	-	50.0	0.0	65	123	390	1450	8.5	2.8	40	2	2	1	0	2	2
26-Nov-99	7:35	24.0	-	0.0	0.0	45	112	390	1450	8.5	3	40.5	-	-	-	-	-	-
27-Nov-99	8:45	15.5	-	0.0	0.0	55	122	390	1450	8.5	3	40	-	-	-	-	-	-
29-Nov-99	7:00	12.0	-	5.5	0.0	32	105	390	1450	8	2.8	40.5	-	-	-	-	-	-
30-Nov-99	4:35	10.5	183.0	4.7	0.0	30	101.5	390	1450	8	2.1	42	0	0	0	0	0	0
2-Dec-99	7:25	5.4	-	0.0	0.0	25	97.5	390	1450	8.5	2	41.5	-	-	-	-	-	-
6-Dec-99	7:20	3.0	-	0.0	0.0	50	120	390	1450	9	2.9	40	-	-	-	-	-	-
8-Dec-99	17:38	3.0	-	0.0	0.0	55	118	390	1450	9	2.2	40	0	0	0	0	1	1
14-Dec-99	9:20	2.0	40.0	0.0	0.0	40	106	390	1450	9	2.4	41	-	-	-	-	-	-
17-Dec-99	9:52	0.6	-	0.0	0.0	25	109	390	1450	9	2.5	41	-	-	-	-	-	-
22-Dec-99	18:40	0.2	-	0.0	0.0	-	102	390	1450	9	2.5	41	0	0	0	0	1	1
4-Jan-00	9:25	0.1	-	0.4	0.0	50	98	390	1450	8.5	2	40	-	-	-	-	-	-
4-Jan-00	18:05	0.3	-	1.7	0.0	60	122	390	1450	9.5	3	40	-	-	-	-	-	-
5-Jan-00	12:16	0.1	-	0.2	0.0	55	118	390	1450	8.9	2.7	40	-	-	-	-	-	-
9-Jan-00	11:25	0.1	-	0.1	0.0	45	113	390	1450	9	2.2	40	-	-	-	-	-	-
10-Jan-00	19:15	0.2	2.0	0.2	0.0	47	108	390	1450	9	2.2	40	0	0	0	0	0	0
14-Jan-00	10:45	0.1	-	0.0	0.0	5	98	390	1450	8.5	1.5	40	-	-	-	-	-	-
19-Jan-00	5:35	0.0	-	0.0	0.0	0	80	390	1450	8.5	1.5	39.5	0	0	0	0	0	0
19-Jan-00	7:05	102.0	-	0.0	0.0	3	84	1500	1490	17	10	34.5	4	3.5	4	2	4.5	4.5
19-Jan-00	17:35	247.0	-	0.0	0.0	15	97	1500	1490	17.5	11	34.5	5.5	4.5	4	0	4.5	4.5
20-Jan-00	8:25	310.0	-	0.0	0.0	5	98	1500	1490	17.5	10.5	33.5	-	-	-	-	-	-
20-Jan-00	11:30	293.0	-	9.0	0.0	10	99	1500	1490	17.5	10.5	34.5	-	-	-	-	-	-
21-Jan-00	5:30	240.0	-	186.0	0.0	10	98	1500	1490	17	10	34	5	4.5	4	0	4	4
22-Jan-00	13:55	255.0	-	243.0	0.0	5	98	1500	1490	17	10	35	5	4.5	4	0	4	4
23-Jan-00	13:20	232.0	-	0.0	0.0	20	98	1500	1490	17	10	35	-	-	-	-	-	-
24-Jan-00	8:45	223.0	-	199.0	0.0	20	99	1500	1490	17	10	35	-	-	-	-	-	-
25-Jan-00	7:00	185.0	782.0	0.0	0.0	15	98	1500	1490	17.5	11	35	-	-	-	-	-	-
25-Jan-00	18:10	181.0	-	0.0	0.0	25	98	1500	1490	17	10	34	-	-	-	-	-	-
26-Jan-00	7:45	215.0	-	78.0	0.0	15	99	1500	1490	17	10	34	-	-	-	-	-	-
26-Jan-00	12:30	228.0	-	122.0	0.0	30	100	1500	1490	17	10	34.5	-	-	-	-	-	-

See end of table for Notes & Abbreviations.

TABLE III
SUB-SLAB VENTING SYSTEM MONITORING DATA
129 COMMERCIAL STREET, PARCEL B OF FORMER MANUFACTURED GAS PLANT SITE
MALDEN, MASSACHUSETTS

Monitoring Date	Time	Influent Total VOC Concentrations		Effluent Total VOC Concentrations		Outdoor Ambient Air Temp. (°F)	Outlet Vapor Temp. (°F)	Flow Velocity (ft./min)		System Vacuum (in. water)		Vacuum at Extraction Points (in. water)						
		PID (ppm)	H&A GC (ug/L)	Effluent - 1 (ppm)	Effluent - 2 (ppm)			Influent	Effluent	Blower	Knockout Drum	Discharge	EP-1	EP-2	EP-3	EP-4	EP-5	
27-Jan-00	8:00	204.0	-	0.0	0.0	15	99	1500	1490	17.5	11	35	-	-	-	-	-	-
27-Jan-00	13:30	180.0	-	0.0	0.0	30	104	1500	1490	18	11	35	-	-	-	-	-	-
28-Jan-00	7:50	165.0	-	46.0	0.0	0	94	1500	1490	17.5	10.5	35	-	-	-	-	-	-
28-Jan-00	13:20	144.0	-	14.0	0.0	20	100	1500	1490	17.5	10.5	36	-	-	-	-	-	-
30-Jan-00	12:10	149.0	-	0.0	0.0	40	100	1500	1490	17	10	35	-	-	-	-	-	-
31-Jan-00	5:30	165.0	-	96.0	0.0	40	100	1500	1490	17	10	35	-	-	-	-	-	-
31-Jan-00	20:20	163.0	-	0.0	0.0	30	100	1500	1490	18	12	34	-	4.5	4	0	4	4
1-Feb-00	9:15	134.0	-	0.0	0.0	25	100	1500	1490	17.5	11.5	35	-	4.5	4	0	4	4
1-Feb-00	19:45	168.0	-	62.0	0.0	25	100	1500	1490	17.5	11.5	35	-	4.5	4	0	4	4
2-Feb-00	7:00	154.0	-	106.0	0.0	5	99	1500	1490	17	10.5	36	-	-	-	-	-	-
3-Feb-00	9:00	154.0	-	0.0	0.0	10	97	1500	1490	17	11	36	-	-	-	-	-	-
3-Feb-00	16:20	157.0	-	0.0	0.0	30	101	1500	1490	17.5	11	35	-	-	-	-	-	-
4-Feb-00	9:00	146.0	-	3.0	0.0	20	100	1500	1490	18	12	35	-	-	-	-	-	-
4-Feb-00	13:40	138.0	-	26.0	0.0	30	101	1500	1490	18	11.5	36	-	-	-	-	-	-
5-Feb-00	22:30	152.0	-	0.0	0.0	25	98	1500	1490	18	12	35	-	-	-	-	-	-
6-Feb-00	7:00	150.0	-	0.0	0.0	20	99	1500	1490	17.5	11	34	-	-	-	-	-	-
7-Feb-00	8:45	138.0	-	0.0	0.0	20	100	1500	1490	17	11	36	-	-	-	-	-	-
7-Feb-00	20:45	127.0	-	26.0	0.0	20	100	1500	1490	17.5	11	36	-	-	-	-	-	-
8-Feb-00	8:00	124.0	-	59.0	0.0	0	97	1500	1490	17	11.5	36	-	-	-	-	-	-
8-Feb-00	17:20	117.0	-	0.0	0.0	25	99	1500	1490	18	11	36	-	-	-	-	-	-
9-Feb-00	7:45	120.0	-	0.0	0.0	15	99	1500	1490	17.5	11	36	-	-	-	-	-	-
10-Feb-00	8:30	129.0	-	0.0	0.0	40	102	1500	1490	17.5	11.5	36	-	-	-	-	-	-
10-Feb-00	18:30	134.0	-	40.0	0.0	35	102	1500	1490	17	13.5	35	-	-	-	-	-	-
11-Feb-00	7:00	137.0	-	105.0	0.0	35	103	1500	1490	17	11	36	-	-	-	-	-	-
12-Feb-00	7:20	128.0	-	0.0	0.0	0	100	1500	1490	17.5	11	36.5	-	-	-	-	-	-
13-Feb-00	15:00	120.0	-	0.0	0.0	25	100	1500	1490	17.5	11	35	-	-	-	-	-	-
14-Feb-00	17:10	76.0	-	0.0	0.0	50	103	1500	1490	17.5	11	35	-	-	-	-	-	-
15-Feb-00	8:00	82.0	520.0	0.3	0.0	30	102	1500	1490	17.5	11	36	-	-	-	-	-	-
16-Feb-00	7:30	85.0	-	48.0	0.0	35	101	1500	1490	17.5	11	36	-	-	-	-	-	-
18-Feb-00	7:00	78.0	-	0.0	0.0	20	100	1500	1490	17	10.5	37	-	-	-	-	-	-
19-Feb-00	9:45	112.0	-	32.0	0.0	-	100	1500	1490	17.5	10.5	36	-	-	-	-	-	-
21-Feb-00	9:00	70.0	-	0.0	0.0	30	100	1500	1490	17	10.5	35.8	-	-	-	-	-	-
22-Feb-00	8:30	102.0	-	0.0	0.0	35	101	1500	1490	17.5	11	35	-	-	-	-	-	-
22-Feb-00	18:50	81.0	-	0.0	0.0	37	101	1500	1490	17.5	11	36	-	-	-	-	-	-
23-Feb-00	14:00	98.0	-	0.5	0.0	50	108	1500	1490	17.5	11.5	35.5	-	-	-	-	-	-
24-Feb-00	8:15	62.0	-	32.0	0.0	50	107	1500	1490	17.5	11	35	-	-	-	-	-	-
24-Feb-00	18:00	98.0	-	77.0	0.0	50	112	1500	1490	17.5	11	34.5	6	5	5	0	6	6
25-Feb-00	6:00	88.0	-	0.0	0.0	-	101	1500	1490	17.5	11	35	-	-	-	-	-	-
26-Feb-00	19:50	80.0	-	0.0	0.0	35	108	1500	1490	17.5	11.5	36	-	-	-	-	-	-
27-Feb-00	12:45	96.0	-	1.0	0.0	60	112	1500	1490	17.5	12	36	-	-	-	-	-	-
28-Feb-00	7:00	90.0	-	0.0	0.0	50	111	1500	1490	17.5	12	36	-	-	-	-	-	-
29-Feb-00	8:00	86.0	-	0.0	0.0	32	100	1500	1490	17.5	12	35	-	-	-	-	-	-
1-Mar-00	10:30	71.0	-	0.0	0.0	50	109	1500	1490	17.5	11.5	35	-	-	-	-	-	-

See end of table for Notes & Abbreviations.

TABLE III
SUB-SLAB VENTING SYSTEM MONITORING DATA
129 COMMERCIAL STREET, PARCEL B OF FORMER MANUFACTURED GAS PLANT SITE
MALDEN, MASSACHUSETTS

Monitoring Date	Time	Influent Total VOC Concentrations		Effluent Total VOC Concentrations		Outdoor Ambient Air Temp. (°F)	Outlet Vapor Temp. (°F)	Flow Velocity (ft./min)		System Vacuum (in. water)		Vacuum at Extraction Points (in. water)						
		PID (ppm)	H&A GC (ug/L)	Effluent - 1 (ppm)	Effluent - 2 (ppm)			Influent	Effluent	Blower	Knockout Drum	Discharge	EP-1	EP-2	EP-3	EP-4	EP-5	
2-Mar-00	10:00	86.0	-	31.0	0.0	50	110	1500	1490	17.5	11.5	35	-	-	-	-	-	-
3-Mar-00	7:45	32.0	-	22.0	0.0	30	103	1500	1490	17.5	11	35	-	-	-	-	-	-
4-Mar-00	9:00	80.0	-	46.0	0.0	40	106	1500	1490	17	11	35	-	-	-	-	-	-
5-Mar-00	14:00	69.0	-	0.0	0.0	55	109	1500	1490	17	11.5	35.5	6	5	5	0	6	-
6-Mar-00	9:00	74.0	-	0.0	0.0	50	106	1500	1490	17.5	11.5	35.5	-	-	-	-	-	-
7-Mar-00	8:00	39.0	-	7.0	0.0	48	106	1500	1490	17	11	36	-	-	-	-	-	-
7-Mar-00	19:00	47.0	-	21.0	0.0	50	110	1500	1490	17	11	36	-	-	-	-	-	-
8-Mar-00	8:20	35.0	-	0.0	0.0	50	110	1500	1490	17	10.5	36	-	-	-	-	-	-
9-Mar-00	8:30	61.0	-	7.0	0.0	60	111	1500	1490	17	11	36	-	-	-	-	-	-
9-Mar-00	17:30	82.0	-	19.0	0.0	70	122	1500	1490	17	11	36	-	-	-	-	-	-
10-Mar-00	6:15	65.0	-	21.0	0.0	45	114	1500	1490	17	11	35	-	-	-	-	-	-
11-Mar-00	18:30	46.0	-	0.0	0.0	40	103	1500	1490	17	11	35	-	-	-	-	-	-
12-Mar-00	13:30	49.0	-	0.0	0.0	45	106	1500	1490	17.5	11	36	-	-	-	-	-	-
13-Mar-00	9:00	45.0	-	0.0	0.0	30	105	1500	1490	17.5	11.5	36	-	-	-	-	-	-
14-Mar-00	8:50	61.0	974.0	4.0	0.0	35	107	1500	1490	17.5	11.5	36	-	-	-	-	-	-
15-Mar-00	8:45	8.0	-	3.0	0.0	45	110	1500	1490	19	11	36	-	-	-	-	-	-
15-Mar-00	20:30	86.0	-	52.0	0.0	55	111	1500	1490	17	11.5	36	-	-	-	-	-	-
16-Mar-00	9:15	99.0	-	58.0	0.0	55	114	1500	1490	17.5	11	36	-	-	-	-	-	-
16-Mar-00	12:45	85.0	-	95.0	0.0	65	120	1500	1490	17.5	11	36	-	-	-	-	-	-
16-Mar-00	19:15	46.0	-	38.0	0.0	60	117	1500	1490	17.5	11	36	-	-	-	-	-	-
17-Mar-00	8:45	50.0	-	0.0	0.0	32	104	1500	1490	17.5	11	34	-	-	-	-	-	-
17-Mar-00	18:30	15.0	-	0.0	0.0	30	102	1500	1490	17	11	35	6	5	5	0	6	-
18-Mar-00	7:30	38.0	-	0.0	0.0	30	104	1500	1490	17.5	11	35	-	-	-	-	-	-
19-Mar-00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-Mar-00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21-Mar-00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22-Mar-00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22-Mar-00	18:30	28.0	-	0.0	0.0	45	105	1500	1490	17.5	10	34.5	-	-	-	-	-	-
23-Mar-00	8:00	28.0	-	0.0	0.0	40	107	1500	1490	17.5	10.5	34.5	-	-	-	-	-	-
23-Mar-00	21:00	32.0	-	0.0	0.0	45	110	1500	1490	17.5	10.5	34.5	-	-	-	-	-	-
24-Mar-00	9:45	32.0	-	0.0	0.0	60	113	1500	1490	17.5	10.5	34.5	-	-	-	-	-	-
24-Mar-00	13:00	34.0	-	0.0	0.0	65	117	1500	1490	17.5	10.5	34.5	-	-	-	-	-	-
25-Mar-00	17:45	38.0	-	0.0	0.0	60	112	1500	1490	17	11	34	-	-	-	-	-	-
27-Mar-00	11:30	32.0	-	28.0	0.0	65	119	1500	1490	17	11	33	-	-	-	-	-	-
28-Mar-00	13:15	47.0	-	29.0	0.0	60	114	1500	1490	18	12.5	32	-	-	-	-	-	-
28-Mar-00	20:00	37.0	-	29.0	0.0	50	112	1500	1490	18	12	33	-	-	-	-	-	-
29-Mar-00	9:00	38.0	262.0	0.0	0.0	50	112	1500	1490	18	12	33	-	-	-	-	-	-
29-Mar-00	18:00	20.0	-	0.0	0.0	45	112	1500	1490	17.5	11	33	-	-	-	-	-	-
30-Mar-00	9:30	11.0	-	0.0	0.0	50	113	1500	1490	17.5	11	33	-	-	-	-	-	-
30-Mar-00	18:15	33.0	-	0.0	0.0	45	113	1500	1490	17.5	11	33	-	-	-	-	-	-
31-Mar-00	7:30	30.0	-	0.0	0.0	50	109	1500	1490	18	11	33.5	-	-	-	-	-	-
1-Apr-00	12:30	28.0	-	0.0	0.0	65	119	1500	1490	17.5	12	33	-	-	-	-	-	-
2-Apr-00	18:30	40.0	-	15.0	0.0	65	119	1500	1490	17.5	11.5	33	7	6	6	1	6	-

See end of table for Notes & Abbreviations.

TABLE III
SUB-SLAB VENTING SYSTEM MONITORING DATA
129 COMMERCIAL STREET, PARCEL B OF FORMER MANUFACTURED GAS PLANT SITE
MALDEN, MASSACHUSETTS

Monitoring Date	Time	Influent Total VOC Concentrations		Effluent Total VOC Concentrations		Outdoor Ambient Air Temp. (°F)	Outlet Vapor Temp. (°F)	Flow Velocity (ft./min)		System Vacuum (in. water)		Vacuum at Extraction Points (in. water)					
		PID (ppm)	H&A GC ^a (ug/L)	Effluent - 1 (ppm)	Effluent - 2 (ppm)			Influent	Effluent	Blower	Knockout Drum	Discharge	EP-1	EP-2	EP-3	EP-4	EP-5
3-Apr-00	14:45	28.0	-	16.0	0.0	62	117	1500	1490	18	11	33	-	-	-	-	-
3-Apr-00	20:30	36.0	-	0.0	0.0	55	117	1500	1490	18	11	33	-	-	-	-	-
4-Apr-00	13:45	21.0	-	0.0	0.0	60	121	1500	1490	17.5	11	33	-	-	-	-	-
5-Apr-00	10:30	21.0	-	0.0	0.0	45	116	1500	1490	18	11	33	-	-	-	-	-
6-Apr-00	8:00	21.0	-	0.0	0.0	40	111	1500	1490	18	11.5	33	-	-	-	-	-
7-Apr-00	8:00	27.0	-	24.0	0.0	50	117	1500	1490	18	11	33	-	-	-	-	-
8-Apr-00	7:15	28.0	-	28.0	0.0	55	117	1500	1450	18	11	33	6	6	5	0	5
9-Apr-00	15:45	21.0	-	0.0	0.0	40	113	1500	1490	17.5	11	33	-	-	-	-	-
10-Apr-00	13:00	32.0	-	6.0	0.0	50	112	1500	1490	17.5	11	34	-	-	-	-	-
11-Apr-00	9:45	47.0	-	34.0	0.0	45	111	1500	1490	17.5	11	34	-	-	-	-	-
12-Apr-00	14:15	25.0	-	13.0	0.0	45	119	1500	1490	17.5	11	34	-	-	-	-	-
13-Apr-00	10:00	38.0	-	10.0	0.0	50	112	1500	1490	17.5	11	34	-	-	-	-	-
14-Apr-00	7:00	50.0	-	6.0	0.0	50	111	1500	1490	17.5	11	34	-	-	-	-	-
17-Apr-00	9:45	46.0	-	0.0	0.0	45	117	1500	1490	18.5	11	33.5	-	-	-	-	-
17-Apr-00	17:45	37.0	-	0.0	0.0	50	116	1500	1500	18	11	34	-	-	-	-	-
18-Apr-00	7:45	15.0	-	0.0	0.0	45	111	1500	1490	18	11	34	-	-	-	-	-
18-Apr-00	19:30	15.0	-	0.0	0.0	45	110	1500	1500	18	11	34	-	-	-	-	-
19-Apr-00	7:00	22.0	-	4.0	0.0	50	112	1500	1500	18	11	34	-	-	-	-	-
19-Apr-00	18:00	16.0	-	5.0	0.0	45	112	1500	1500	18	11	34	-	-	-	-	-
20-Apr-00	9:15	10.0	-	8.0	0.0	50	117	1500	1500	18	11	34	-	-	-	-	-
20-Apr-00	17:30	10.0	-	0.0	0.0	50	115	1500	1500	18	11	34	-	-	-	-	-
21-Apr-00	9:30	6.0	-	0.0	0.0	50	117	1500	1500	18	11	33	-	-	-	-	-
21-Apr-00	15:15	5.0	-	0.0	0.0	40	112	1500	1500	18	12	33	-	-	-	-	-
24-Apr-00	10:30	1.6	420.0	0.4	0.0	50	106	1500	1500	17.5	11	33	-	-	-	-	-
26-Apr-00	7:30	3.4	-	0.9	0.0	-	109	1500	1500	18	12	33	-	-	-	-	-
27-Apr-00	7:00	3.3	-	1.5	0.0	50	110	1500	1500	18	12	33	-	-	-	-	-
28-Apr-00	9:30	4.6	-	3.0	0.0	50	116	1500	1500	18	12	33	-	-	-	-	-
29-Apr-00	16:00	30.0	168.0	8.0	0.0	50	118	1500	1500	18	12	34	-	-	-	-	-
1-May-00	6:00	17.0	-	0.0	0.0	50	115	1500	1500	18	11	33	-	-	-	-	-
2-May-00	10:00	6.0	-	0.0	0.0	60	117	1500	1500	19	12	34	-	-	-	-	-
3-May-00	8:30	18.0	-	0.1	0.0	70	123	1500	1500	18	11.5	33	-	-	-	-	-
4-May-00	12:00	16.0	-	0.0	0.0	65	120	1500	1500	18	11	33	-	-	-	-	-
5-May-00	9:15	15.0	-	0.0	0.0	70	129	1500	1500	18	11.5	33	-	-	-	-	-
8-May-00	7:00	11.8	-	1.0	0.0	75	129	1500	1500	18	11	33	-	-	-	-	-
9-May-00	9:30	12.0	-	1.8	0.0	65	128	1500	1500	18	11	33	-	-	-	-	-
9-May-00	17:00	12.0	-	0.0	0.0	50	117	1500	1500	17.5	11	33	-	-	-	-	-
10-May-00	9:15	13.0	-	0.0	0.0	70	122	1500	1500	17.5	11	33	-	-	-	-	-
11-May-00	15:30	11.3	-	0.0	0.0	65	121	1500	1500	18	11.5	33	-	-	-	-	-
12-May-00	9:00	14.0	-	0.0	0.0	65	121	1500	1500	18	11	33	-	-	-	-	-
15-May-00	7:00	17.0	-	0.1	0.0	60	121	1500	1500	17.5	11	33	-	-	-	-	-
16-May-00	9:00	7.0	-	0.3	0.0	65	122	1500	1500	18	11	33	-	-	-	-	-
17-May-00	16:00	13.0	-	1.1	0.0	70	121	1500	1500	18	11.5	33	-	-	-	-	-
18-May-00	16:30	15.2	-	1.9	0.0	55	119	1500	1500	19	12	33	-	-	-	-	-
19-May-00	10:00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

See end of table for Notes & Abbreviations.

TABLE III
SUB-SLAB VENTING SYSTEM MONITORING DATA
129 COMMERCIAL STREET, PARCEL B OF FORMER MANUFACTURED GAS PLANT SITE
MALDEN, MASSACHUSETTS

Monitoring Date	Time	Influent Total VOC Concentrations		Effluent Total VOC Concentrations		Outdoor Ambient Air Temp. (°F)	Outlet Vapor Temp. (°F)	Flow Velocity (ft./min)		System Vacuum (in. water)		Vacuum at Extraction Points (in. water)					
		PID (ppm)	H&A GC (ug/L)	Effluent - 1 (ppm)	Effluent - 2 (ppm)			Influent	Effluent	Blower	Knockout Drum	Discharge	EP-1	EP-2	EP-3	EP-4	EP-5
20-May-00	16:45	15.3	-	2.5	0.0	50	120	1500	1500	17	11	33	-	-	-	-	-
22-May-00	13:15	12.3	-	4.6	0.0	60	121	1500	1500	17.5	12	32.5	-	-	-	-	-
24-May-00	9:00	9.4	113.0	4.5	0.0	60	119	1500	1500	17.5	12.5	32	-	-	-	-	-
25-May-00	12:00	10.1	-	6.5	0.0	55	120	1500	1500	18	12	32	-	-	-	-	-
26-May-00	8:00	10.0	-	7.0	0.0	60	121	1500	1500	18	12	32	-	-	-	-	-
30-May-00	12:00	11.0	-	9.0	0.0	70	123	1500	1500	18	12	32.5	-	-	-	-	-
31-May-00	7:30	10.6	-	8.0	0.0	70	128	1500	1500	18	11.5	32	-	-	-	-	-
1-Jun-00	15:00	10.1	-	10.0	0.0	85	140	1500	1500	18	11	32	-	-	-	-	-
2-Jun-00	8:00	10.0	-	9.5	0.0	80	132	1500	1500	18	11	33	-	-	-	-	-
5-Jun-00	7:00	8.0	-	0.0	0.0	80	122	1500	1500	18	12	33	-	-	-	-	-
7-Jun-00	18:00	7.2	-	0.0	0.0	75	123	1500	1500	18	12	33	-	-	-	-	-
8-Jun-00	17:00	6.0	-	0.0	0.0	75	123	1500	1500	17.5	12	33	-	-	-	-	-
9-Jun-00	17:00	6.8	-	0.0	0.0	65	121	1500	1500	18	12	33	-	-	-	-	-
12-Jun-00	9:00	6.5	-	0.3	0.0	60	120	1500	1500	18	12.5	33	-	-	-	-	-
13-Jun-00	8:00	4.8	-	0.2	0.0	65	123	1500	1500	18	12.5	33	-	-	-	-	-
14-Jun-00	9:00	3.3	-	0.1	0.0	60	122	1500	1500	18	12.5	33	-	-	-	-	-
15-Jun-00	8:45	1.7	-	0.2	0.0	60	123	1500	1500	18	12.5	33	-	-	-	-	-
17-Jun-00	8:15	5.0	-	2.0	0.0	75	133	1500	1500	19	12	32	-	-	-	-	-
19-Jun-00	15:30	6.2	-	2.5	0.0	70	133	1500	1500	18	12.5	33	-	-	-	-	-
20-Jun-00	8:00	5.7	-	2.2	0.0	75	134	1500	1500	18	12.5	33	-	-	-	-	-
21-Jun-00	7:30	4.6	-	2.7	0.0	75	133	1500	1500	18	12.5	33	-	-	-	-	-
22-Jun-00	9:15	3.9	-	2.6	0.0	80	134	1500	1500	17.5	12.5	32.5	-	-	-	-	-
23-Jun-00	9:00	4.2	51.0	3.3	0.0	75	134	1500	1500	17.5	12.5	32.5	-	-	-	-	-
27-Jun-00	9:30	3.7	-	3.4	0.0	75	139	1500	1500	17.5	12.5	32.5	-	-	-	-	-
29-Jun-00	7:15	3.6	-	3.3	0.0	75	139	1500	1500	16	11.5	32.5	-	-	-	-	-
05-Jul-00	8:00	3.0	-	0.6	0.0	80	137	1500	1500	16	11	31	-	-	-	-	-
07-Jul-00	8:45	2.3	-	1.0	0.0	70	135	1500	1500	15.5	11	33	-	-	-	-	-
09-Jul-00	10:00	2.9	-	0.0	0.0	80	138	1500	1500	15.5	11	33	7	6.5	6	1	6
12-Jul-00	9:00	2.3	-	0.1	0.0	80	137	1500	1500	16	11	33	-	-	-	-	-
13-Jul-00	8:00	2.3	-	0.1	0.0	85	137	1500	1500	16	11	32.5	-	-	-	-	-
14-Jul-00	9:00	2.3	-	0.2	0.0	80	137	1500	1500	16	11	32.5	-	-	-	-	-
20-Jul-00	17:00	2.2	-	0.4	0.0	80	137	1500	1500	16	11	33	-	-	-	-	-
26-Jul-00	7:00	2.0	-	0.7	0.0	80	137	1500	1500	16	11	33	-	-	-	-	-
31-Jul-00	15:30	1.9	15.0	1.2	0.0	70	137	1500	1500	17	11	33	-	-	-	-	-
02-Aug-00	16:30	1.6	-	0.9	0.0	75	137	1500	1500	16	11	33	-	-	-	-	-
07-Aug-00	7:30	1.5	-	0.6	0.0	75	137	1500	1500	16	11	33	-	-	-	-	-
15-Aug-00	8:15	1.3	-	0.2	0.0	70	136	1500	1500	16	11	34	-	-	-	-	-
17-Aug-00	9:15	1.2	-	0.3	0.0	75	136	1500	1500	16	11	33	-	-	-	-	-
21-Aug-00	12:15	1.0	-	1.2	0.0	85	140	1500	1500	17.5	11.5	33.5	-	-	-	-	-
28-Aug-00	15:30	0.6	-	0.8	0.0	80	138	1500	1500	17.5	11.5	33	-	-	-	-	-
29-Aug-00	11:30	0.6	20.0	0.8	0.0	80	138	1500	1500	17.5	11.5	33	-	-	-	-	-
01-Sep-00	16:30	0.7	-	0.9	0.0	80	140	1500	1500	17.5	11.5	33	-	-	-	-	-
05-Sep-00	7:30	0.6	-	0.5	0.0	75	140	1500	1500	17.5	11.5	34	-	-	-	-	-

See end of table for Notes & Abbreviations.

TABLE III
SUB-SLAB VENTING SYSTEM MONITORING DATA
129 COMMERCIAL STREET, PARCEL B OF FORMER MANUFACTURED GAS PLANT SITE
MALDEN, MASSACHUSETTS

Monitoring Date	Time	Influent Total VOC Concentrations		Effluent Total VOC Concentrations		Outdoor Ambient Air Temp. (°F)	Outlet Vapor Temp. (°F)	Flow Velocity (ft./min)		System Vacuum (in. water)			Vacuum at Extraction Points (in. water)				
		PID (ppm)	H&A GC (ug/L)	Effluent - 1 (ppm)	Effluent - 2 (ppm)			Influent	Effluent	Blower	Knockout Drum	Discharge	EP-1	EP-2	EP-3	EP-4	EP-5
10-Sep-00	19:15	0.3	-	0.4	0.0	70	130	1500	1500	17.5	11.5	34	7.5	7	6	2	6.5
12-Sep-00	7:00	0.4	-	0.0	0.0	80	135	1500	1500	17.5	11.5	34	-	-	-	-	-
20-Sep-00	14:15	0.7	-	0.0	0.0	75	137	1500	1500	18	12	33	-	-	-	-	-
27-Sep-00	5:15	0.4	ND	0.0	0.0	64	120	1500	1500	18	11	34	-	-	-	-	-
02-Oct-00	7:30	0.2	-	0.0	0.0	55	121	1500	1500	18	11	33.5	-	-	-	-	-
08-Oct-00	8:00	0.0	-	0.0	0.0	55	121	390	1500	8	2	39	1	0.5	1	0	1
11-Oct-00	13:15	0.1	-	0.0	0.0	65	135	390	1500	8.5	3	38	-	-	-	-	-
23-Oct-00	18:30	0.0	-	0.0	0.0	60	130	390	1500	9	3	38	-	-	-	-	-
28-Oct-00	17:00	0.0	-	0.0	0.0	60	132	390	1500	8.5	3	38	-	-	-	-	-
31-Oct-00	18:30	0.0	2.0	0.0	0.0	55	125	390	1500	8.5	3	38	-	-	-	-	-
03-Nov-00	17:50	0.0	-	0.0	0.0	60	130	390	1500	8.5	3	38	-	-	-	-	-
08-Nov-00	17:10	0.0	-	0.0	0.0	50	121	390	1500	9	3	38	-	-	-	-	-
13-Nov-00	17:30	0.0	-	0.0	0.0	45	115	390	1500	10	2	38	-	-	-	-	-
17-Nov-00	17:00	0.0	-	0.0	0.0	35	109	390	1500	10	2	38	-	-	-	-	-
22-Nov-00	15:45	0.0	-	0.0	0.0	32	108	390	1500	10.5	2.5	38	-	-	-	-	-
28-Nov-00	17:00	0.0	9.0	0.0	0.0	45	107	390	1500	11	2	38	-	-	-	-	-
04-Dec-00	6:00	0.0	-	0.0	0.0	30	105	390	1500	13.5	2.5	38	-	-	-	-	-
11-Dec-00	11:00	0.0	-	0.0	0.0	40	108	390	1500	13	2	38	-	-	-	-	-
21-Dec-00	8:45	0.0	-	0.0	0.0	20	97	390	1500	13.5	2.5	38	-	-	-	-	-
27-Dec-00	8:00	0.0	-	0.0	0.0	20	92	390	1500	14	2	38	-	-	-	-	-
29-Dec-00	10:00	0.0	-	0.0	0.0	25	91	390	1500	14	2	38	-	-	-	-	-
31-Dec-00	11:00	0.0	3.0	0.0	0.0	20	92	390	1500	14	2	38	-	-	-	-	-
03-Jan-01	16:45	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
04-Jan-01	9:00	0.0	-	0.0	0.0	20	96	390	1500	14	2	37	-	-	-	-	-
09-Jan-01	17:30	0.0	-	0.0	0.0	25	101	390	1500	16	2	36	1	1	1	0	1
16-Jan-01	7:30	0.0	-	0.0	0.0	20	96	390	1500	17	2	36	-	-	-	-	-
19-Jan-01	15:00	0.0	-	0.0	0.0	20	97	390	1500	17.5	2	34	-	-	-	-	-
22-Jan-01	9:00	0.0	ND	0.0	0.0	15	98	390	1500	17.5	2	34	-	-	-	-	-
24-Jan-01	9:30	0.0	-	0.0	0.0	25	105	390	1500	18	2	34	-	-	-	-	-
29-Jan-01	7:30	0.0	-	0.0	0.0	25	117	390	1500	18.5	2.5	33	-	-	-	-	-
31-Jan-01	9:00	0.0	-	0.0	0.0	45	117	390	1500	18.5	2.5	33	-	-	-	-	-
02-Feb-01	9:00	0.0	-	0.0	0.0	30	107	390	1500	19	2.5	34	-	-	-	-	-
05-Feb-01	7:30	0.0	-	0.0	0.0	30	115	390	1500	19.5	2.5	33	-	-	-	-	-
7-Feb-01	10:00	0.0	-	0.0	0.0	40	117	390	1500	20	2.5	33	-	-	-	-	-
9-Feb-01	9:30	0.0	-	0.0	0.0	40	114	390	1500	20	2	34	-	-	-	-	-
12-Feb-01	9:30	0.0	-	0.0	0.0	15	97	390	1500	19.5	2	34	-	-	-	-	-
14-Feb-01	7:30	0.0	-	0.0	0.0	25	106	390	1500	20	2.5	33	-	-	-	-	-
15-Feb-01	10:45	0.0	-	0.0	0.0	40	99	390	1500	20	2.5	33	-	-	-	-	-
16-Feb-01	7:30	0.0	-	0.0	0.0	25	105	390	1500	20	2.5	33	-	-	-	-	-
20-Feb-01	9:15	0.0	-	0.0	0.0	40	114	390	1500	20.5	2.5	33	-	-	-	-	-
23-Feb-01	7:30	0.0	-	0.0	0.0	30	108	390	1500	20.5	2.5	33	-	-	-	-	-
27-Feb-01	9:00	0.0	ND	0.0	0.0	30	110	390	1500	21	2.5	32.5	-	-	-	-	-
1-Mar-01	7:00	0.0	-	0.0	0.0	25	100	390	1500	21	2	32.5	-	-	-	-	-

See end of table for Notes & Abbreviations.

TABLE III
SUB-SLAB VENTING SYSTEM MONITORING DATA
129 COMMERCIAL STREET, PARCEL B OF FORMER MANUFACTURED GAS PLANT SITE
MALDEN, MASSACHUSETTS

Monitoring Date	Time	Influent Total VOC Concentrations		Effluent Total VOC Concentrations		Outdoor Ambient Air Temp. (°F)	Outlet Vapor Temp. (°F)	Flow Velocity (ft./min)		System Vacuum (in. water)		Vacuum at Extraction Points (in. water)						
		PID (ppm)	H&A GC (ug/L)	Effluent - 1 (ppm)	Effluent - 2 (ppm)			Influent	Effluent	Blower	Knockout Drum	Discharge	EP-1	EP-2	EP-3	EP-4	EP-5	
2-Mar-01	9:00	0.0	-	0.0	0.0	20	99	390	1500	21	2	32.5	-	-	-	-	-	-
5-Mar-01	12:00	0.0	-	0.0	0.0	30	100	390	1500	20.5	2	32	-	-	-	-	-	-
7-Mar-01	13:00	0.0	-	0.0	0.0	30	96	390	1500	21	2	32	-	-	-	-	-	-
8-Mar-01	7:00	0.0	-	0.0	0.0	20	114	390	1500	21	2	32	-	-	-	-	-	-
9-Mar-01	8:00	0.0	-	0.0	0.0	30	114	390	1500	21	2	32	-	-	-	-	-	-
12-Mar-01	7:30	0.0	-	0.0	0.0	30	115	390	1500	21	2	32	-	-	-	-	-	-
14-Mar-01	10:00	0.0	-	0.0	0.0	40	116	390	1500	21	2	32	-	-	-	-	-	-
16-Mar-01	8:00	0.0	-	0.0	0.0	30	113	390	1500	21.5	2	32	-	-	-	-	-	-
19-Mar-01	8:00	0.0	-	0.0	0.0	30	116	390	1500	21.5	2	32	-	-	-	-	-	-
20-Mar-01	9:00	0.0	-	0.0	0.0	35	117	390	1500	21.5	2	32	-	-	-	-	-	-
22-Mar-01	9:00	0.0	-	0.0	0.0	40	-	390	1500	21.5	2	32	-	-	-	-	-	-
23-Mar-01	9:00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
26-Mar-01	9:30	0.0	ND	0.0	0.0	35	112	390	1500	21	2	32	-	-	-	-	-	-
28-Mar-01	15:00	0.0	-	0.0	0.0	30	105	390	1500	21	2	32	-	-	-	-	-	-
30-Mar-01	8:00	0.0	-	0.0	0.0	30	118	390	1500	21.5	2	32	-	-	-	-	-	-
2-Apr-01	9:45	0.0	-	0.0	0.0	40	117	390	1500	21.5	3	32	-	-	-	-	-	-
4-Apr-01	10:30	0.0	-	0.0	0.0	45	124	390	1500	21.5	3	32	-	-	-	-	-	-
9-Apr-01	13:00	0.0	-	0.0	0.0	65	133	390	1500	9.5	3.5	37	-	-	-	-	-	-
10-Apr-01	10:00	0.0	-	0.0	0.0	55	117	390	1500	10	4	38	-	-	-	-	-	-
13-Apr-01	10:00	0.0	-	0.0	0.0	60	117	390	1500	10	4	37.5	-	-	-	-	-	-
16-Apr-01	9:30	0.0	-	0.0	0.0	45	117	390	1500	10	4	38	-	-	-	-	-	-
19-Apr-01	15:00	0.0	-	0.0	0.0	60	129	390	1500	10	4	38	-	-	-	-	-	-
20-Apr-01	16:00	0.0	-	0.0	0.0	60	137	390	1500	10	4.5	36	-	-	-	-	-	-
24-Apr-01	15:45	0.0	-	0.0	0.0	85	151	390	1500	10	4.5	36	-	-	-	-	-	-
25-Apr-01	16:00	0.0	-	0.0	0.0	60	129	390	1500	10	4	38	-	-	-	-	-	-
27-Apr-01	11:45	0.0	-	0.0	0.0	65	128	390	1500	10	4	38	-	-	-	-	-	-
30-Apr-01	19:00	0.0	5.0	0.0	0.0	65	126	390	1500	10	4	38	-	-	-	-	-	-
1-May-01	8:30	0.0	-	0.0	0.0	65	126	390	1500	10	4	36	-	-	-	-	-	-
4-May-01	15:00	0.0	-	0.0	0.0	80	120	390	1500	10	5	36	-	-	-	-	-	-
7-May-01	8:00	0.0	-	0.0	0.0	70	138	390	1500	10	4.5	37.5	-	-	-	-	-	-
9-May-01	8:00	0.0	-	0.0	0.0	65	122	390	1500	10	4.5	37.5	-	-	-	-	-	-
11-May-01	7:30	0.0	-	0.0	0.0	85	136	390	1500	10	5	37.5	-	-	-	-	-	-
14-May-01	10:00	0.0	-	0.0	0.0	70	142	390	1500	10	5	37	-	-	-	-	-	-
15-May-01	16:00	0.0	-	0.0	0.0	65	124	390	1500	10	38	4	-	-	-	-	-	-
18-May-01	7:30	0.0	-	0.0	0.0	70	122	390	1500	10	4	37.5	-	-	-	-	-	-
22-May-01	14:00	0.0	-	0.0	0.0	70	119	390	1500	10	4	38	-	-	-	-	-	-
24-May-01	7:00	0.0	-	0.0	0.0	75	126	390	1500	10	4	38	-	-	-	-	-	-
25-May-01	10:00	0.0	-	0.0	0.0	70	122	390	1500	10	4	38	-	-	-	-	-	-
31-May-01	8:00	0.0	6.0	0.0	0.0	60	117	390	1500	10	4	38	-	-	-	-	-	-
1-Jun-01	8:00	0.0	-	0.0	0.0	70	124	390	1500	10.5	4.5	38	-	-	-	-	-	-
4-Jun-01	13:00	0.0	-	0.0	0.0	75	140	390	1500	10.5	4.5	37	-	-	-	-	-	-
6-Jun-01	9:30	0.0	-	0.0	0.0	70	137	390	1500	10.5	5	37	-	-	-	-	-	-
8-Jun-01	13:30	0.0	-	0.0	0.0	80	158	390	1500	10.5	5	36	-	-	-	-	-	-

See end of table for Notes & Abbreviations.

TABLE III
SUB-SLAB VENTING SYSTEM MONITORING DATA
129 COMMERCIAL STREET, PARCEL B OF FORMER MANUFACTURED GAS PLANT SITE
MALDEN, MASSACHUSETTS

Monitoring Date	Time	Influent Total VOC Concentrations		Effluent Total VOC Concentrations		Outdoor Ambient Air Temp. (°F)	Outlet Vapor Temp. (°F)	Flow Velocity (ft./min)		System Vacuum (in. water)		Vacuum at Extraction Points (in. water)						
		PID (ppm)	H&A GC (ug/L)	Effluent - 1 (ppm)	Effluent - 2 (ppm)			Influent	Effluent	Blower	Knockout Drum	Discharge	EP-1	EP-2	EP-3	EP-4	EP-5	
11-Jun-01	9:30	0.0	-	0.0	0.0	75	140	390	1500	10.5	5	36	-	-	-	-	-	-
13-Jun-01	7:00	0.0	-	0.0	0.0	80	140	390	1500	10.5	5	36	-	-	-	-	-	-
15-Jun-01	15:00	0.0	-	0.0	0.0	80	140	390	1500	11	5	36	-	-	-	-	-	-
18-Jun-01	5:00	0.0	-	0.0	0.0	75	140	390	1500	11	5	36.5	-	-	-	-	-	-
21-Jun-01	9:30	0.0	-	0.0	0.0	70	140	390	1500	11	5	37	-	-	-	-	-	-
23-Jun-01	8:00	0.0	-	0.0	0.0	80	140	390	1500	11	5	36	-	-	-	-	-	-
25-Jun-01	12:00	0.0	-	0.0	0.0	85	151	390	1500	11	5	36	-	-	-	-	-	-
27-Jun-01	10:00	0.0	3.0	0.0	0.0	85	154	390	1500	11	5	36	-	-	-	-	-	-
3-Jul-01	8:00	0.0	-	0.0	0.0	80	140	390	1500	11	5	37	-	-	-	-	-	-
5-Jul-01	7:30	0.0	-	0.0	0.0	85	150	390	1500	11	5	37	-	-	-	-	-	-
6-Jul-01	8:00	0.0	-	0.0	0.0	90	155	390	1500	11	5	37	-	-	-	-	-	-
9-Jul-01	7:00	0.0	-	0.0	0.0	85	146	390	1500	11	5	36	-	-	-	-	-	-
10-Jul-01	16:00	0.0	-	0.0	0.0	90	152	390	1500	11	5	36	-	-	-	-	-	-
11-Jul-01	7:30	0.0	-	0.0	0.0	85	150	390	1500	11	5	37	-	-	-	-	-	-
13-Jul-01	17:30	0.0	-	0.0	0.0	85	150	390	1500	11	5	37	-	-	-	-	-	-
17-Jul-01	7:15	0.0	-	0.0	0.0	75	137	390	1500	11	5	37	-	-	-	-	-	-
20-Jul-01	11:30	0.0	-	0.0	0.0	85	157	390	1500	11.5	5	36	-	-	-	-	-	-
24-Jul-01	8:30	0.0	-	0.0	0.0	80	144	390	1500	11.5	5	36	-	-	-	-	-	-
27-Jul-01	8:00	0.0	ND	0.0	0.0	70	132	390	1500	11.5	5	37	-	-	-	-	-	-
30-Jul-01	11:00	0.0	-	0.0	0.0	80	145	390	1500	12	5	36	-	-	-	-	-	-
5-Aug-01	15:00	-	-	-	-	80	120	-	-	-	-	-	System off, restart					-
7-Aug-01	16:00	0.0	-	0.0	0.0	95	167	390	1500	12	5	36	-	-	-	-	-	-
8-Aug-01	9:00	0.0	-	0.0	0.0	80	145	390	1500	12	5	35.5	-	-	-	-	-	-
10-Aug-01	18:00	0.0	-	0.0	0.0	80	145	390	1500	12.5	5	35.5	-	-	-	-	-	-
13-Aug-01	7:30	0.0	-	0.0	0.0	75	145	390	1500	12.5	5	35.5	-	-	-	-	-	-
16-Aug-01	10:00	0.0	-	0.0	0.0	80	144	390	1500	13	5	35.5	-	-	-	-	-	-
20-Aug-01	9:15	0.0	-	0.0	0.0	75	144	390	1500	13.5	5	35	-	-	-	-	-	-
24-Aug-01	8:30	0.0	-	0.0	0.0	75	144	390	1500	15	5	35	-	-	-	-	-	-
27-Aug-01	7:30	0.0	-	0.0	0.0	80	145	390	1500	15	5	34	-	-	-	-	-	-
29-Aug-01	7:30	0.0	-	0.0	0.0	75	144	390	1500	15	5	35	-	-	-	-	-	-
31-Aug-01	8:00	0.0	1.0	0.0	0.0	75	143	390	1500	15.5	5	34	-	-	-	-	-	-
14-Sep-01	11:15	0.0	-	0.0	0.0	65	126	390	1500	15.5	4	34	-	-	-	-	-	-
21-Sep-01	13:30	0.0	-	0.0	0.0	65	140	390	1500	17	4	34	-	-	-	-	-	-
30-Sep-01	16:00	0.0	3.0	0.0	0.0	75	142	390	1500	17	4	34	1	1	1	0	1	1
4-Oct-01	8:10	0.0	-	0.0	0.0	75	138	390	1500	17	4	34	-	-	-	-	-	-
8-Oct-01	12:34	0.0	-	0.0	0.0	65	85	390	1500	20	4.5	16	-	-	-	-	-	-
9-Oct-01	11:50	0.0	-	0.0	0.0	65	132	390	1500	20	4.5	16	-	-	-	-	-	-
15-Oct-01	10:40	0.0	-	0.0	0.0	65	135	390	1500	20.5	4	16.5	-	-	-	-	-	-
24-Oct-01	12:15	0.0	-	0.0	0.0	75	150	390	1500	22	4.5	18	-	-	-	-	-	-
29-Oct-01	12:00	0.0	ND	0.0	0.0	55	130	390	1500	22.5	3	32	-	-	-	-	-	-
31-Oct-01	14:30	0.0	-	0.0	0.0	55	130	390	1500	22.5	4	17.5	-	-	-	-	-	-
10-Nov-01	11:15	0.0	-	0.0	0.0	55	122	390	1500	24	3	32	-	-	-	-	-	-
12-Nov-01	10:30	0.0	-	0.0	0.0	55	122	390	1500	22	2	32	-	-	-	-	-	-

See end of table for Notes & Abbreviations.

TABLE III
SUB-SLAB VENTING SYSTEM MONITORING DATA
129 COMMERCIAL STREET, PARCEL B OF FORMER MANUFACTURED GAS PLANT SITE
MALDEN, MASSACHUSETTS

Monitoring Date	Time	Influent Total VOC Concentrations		Effluent Total VOC Concentrations		Outdoor Ambient Air Temp. (°F)	Outlet Vapor Temp. (°F)	Flow Velocity (ft./min)		System Vacuum (in. water)			Vacuum at Extraction Points (in. water)				
		PID (ppm)	H&A GC (ug/L)	Effluent - 1 (ppm)	Effluent - 2 (ppm)			Influent	Effluent	Blower	Knockout Drum	Discharge	EP-1	EP-2	EP-3	EP-4	EP-5
16-Nov-01	14:30	0.0	-	0.1	0.0	70	148	390	1500	24	3.5	30	-	-	-	-	-
21-Nov-01	11:20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
26-Nov-01	8:00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
27-Nov-01	13:15	0.0	-	0.0	0.0	55	130	-	-	22	4	30	-	-	-	-	-
30-Nov-01	6:45	0.0	4.0	0.0	0.0	45	114	-	-	22	3	31	-	-	-	-	-
6-Dec-01	12:45	0.0	-	0.0	0.0	75	146	-	-	24	4.5	29	-	-	-	-	-
7-Dec-01	14:45	0.0	-	0.0	0.0	65	140	-	-	24	4.5	29	-	-	-	-	-
12-Dec-01	12:00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
19-Dec-01	14:15	0.0	ND	0.0	0.0	55	118	-	-	11	4.5	34	-	-	-	-	-
21-Dec-01	13:10	0.0	-	0.0	0.0	45	112	450	1500	11	4.5	38	-	-	-	-	-
28-Dec-01	13:15	0.0	-	0.0	0.0	40	98	450	1500	12	4.5	38	-	-	-	-	-
3-Jan-02	7:45	0.0	-	0.0	0.0	35	92	750	1500	12	2	37	-	-	-	-	-
4-Jan-02	11:15	0.0	-	0.0	0.0	35	106	1000	1400	12	3	38	-	-	-	-	-
7-Jan-02	13:30	0.0	-	0.0	0.0	35	104	800	1250	11	3	37	-	-	-	-	-
11-Jan-02	13:30	0.0	-	0.0	0.0	55	108	-	-	12	3	38	-	-	-	-	-
16-Jan-02	15:30	0.0	-	0.0	0.0	45	110	500	1500	11	3	38	-	-	-	-	-
22-Jan-02	12:00	0.0	-	0.0	0.0	55	111	500	1400	10	3	38	-	-	-	-	-
28-Jan-02	15:40	0.0	-	0.0	0.0	60	120	700	1250	10	3.5	38	-	-	-	-	-
31-Jan-02	7:00	0.0	ND	0.0	0.0	35	94	-	-	10	3	40	-	-	-	-	-
8-Feb-02	8:45	0.0	-	0.0	0.0	35	102	750	1500	10	3	38	-	-	-	-	-
12-Feb-02	7:00	0.0	-	0.0	0.0	15	90	-	-	10	3	38	-	-	-	-	-
27-Feb-02	15:15	0.0	ND	0.0	0.0	34	104	1200	1400	10	3	38	-	-	-	-	-
8-Mar-02	16:40	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18-Mar-02	9:30	0.0	-	0.0	0.0	32	100	700	1500	10	3.5	38	-	-	-	-	-
28-Mar-02	13:30	0.0	ND	0.0	0.0	55	130	700	1400	10	4	38	-	-	-	-	-
5-Apr-02	14:00	0.0	-	0.0	0.0	55	-	-	-	-	-	-	-	-	-	-	-
9-Apr-02	17:30	0.0	-	0.0	0.0	65	136	-	-	11	4	37	-	-	-	-	-
18-Apr-02	8:45	0.0	-	0.0	0.0	55	124	550	1250	10	4	38	-	-	-	-	-
26-Apr-02	15:00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2-May-02	-	0.0	0.0	0.0	0.0	55	110	450	1450	11	4	38	-	-	-	-	-
8-May-02	15:30	0.0	-	0.0	0.0	60	130	550	1350	12	4	38	-	-	-	-	-
16-May-02	16:00	0.0	-	0.0	0.0	65	148	450	1250	12	5	37	-	-	-	-	-
20-May-02	12:30	0.0	-	0.0	0.0	60	130	500	1400	12	4	38	-	-	-	-	-
22-May-02	16:10	0.0	-	0.0	0.0	70	138	450	1250	12	5	36	-	-	-	-	-
31-May-02	16:30	-	-	-	-	70	144	425	1250	13	5	37	-	-	-	-	-
5-Jun-02	13:00	0.0	0.0	0.0	0.0	60	136	-	-	12	4	36	-	-	-	-	-
13-Jun-02	16:30	0.0	-	0.0	0.0	70	131	500	1300	13	4	38	-	-	-	-	-
19-Jun-02	14:40	0.0	-	0.0	0.0	75	144	425	1250	13	4.5	35	-	-	-	-	-
27-Jun-02	11:30	0.0	0.0	0.0	0.0	85	158	-	-	14	5	34	-	-	-	-	-
3-Jul-02	15:30	0.0	-	0.0	0.0	90	172	-	-	15	5	34	-	-	-	-	-
9-Jul-02	12:00	0.0	-	0.0	0.0	80	158	600	1250	16	4.5	34	-	-	-	-	-
19-Jul-02	15:30	0.0	-	0.0	0.0	75	156	500	1100	17	4	32	-	-	-	-	-
24-Jul-02	14:00	0.0	-	0.0	0.0	70	150	1000	1500	20	4.5	32	-	-	-	-	-

See end of table for Notes & Abbreviations.

TABLE III
SUB-SLAB VENTING SYSTEM MONITORING DATA
129 COMMERCIAL STREET, PARCEL B OF FORMER MANUFACTURED GAS PLANT SITE
MALDEN, MASSACHUSETTS

Monitoring Date	Time	Influent Total VOC Concentrations		Effluent Total VOC Concentrations		Outdoor Ambient Air Temp. (°F)	Outlet Vapor Temp. (°F)	Flow Velocity (ft./min)		System Vacuum (in. water)		Vacuum at Extraction Points (in. water)				
		PID (ppm)	H&A GC (ug/L)	Effluent - 1 (ppm)	Effluent - 2 (ppm)			Influent	Effluent	Blower	Knockout Drum	EP-1	EP-2	EP-3	EP-4	EP-5
30-Jul-02	12:30	0.0	0.0	0.0	0.0	85	174	500	1000	22	5	-	-	-	-	-
9-Aug-02	14:15	0.0	-	0.0	0.0	70	170	500	1100	25	5	-	-	-	-	-
16-Aug-02	12:30	0.0	-	0.0	0.0	90	182	-	-	28	4.5	-	-	-	-	-
23-Aug-02	16:00	0.0	-	0.0	0.0	85	172	-	-	27	5	-	-	-	-	-
27-Aug-02	12:20	0.0	0.0	0.0	0.0	70	-	420	1100	-	-	-	-	-	-	-
11-Sep-02	16:00	-	-	-	-	60	-	-	-	-	-	-	-	-	-	-
12-Sep-02	14:00	-	-	-	-	60	-	-	-	-	-	-	-	-	-	-
4-Oct-02	14:45	0.0	-	0.0	0.0	65	148	-	-	30	4.5	-	-	-	-	-
8-Oct-02	8:30	0.0	-	0.0	0.0	55	141	140	1200	31	4.5	-	-	-	-	-
14-Oct-02	12:00	0.0	-	0.0	0.0	60	150	-	-	30	4	-	-	-	-	-
25-Oct-02	15:30	-	-	-	-	48	-	-	-	-	-	-	-	-	-	-
28-Oct-02	16:30	0.0	0.0	0.0	0.0	50	140	-	-	32	4	-	-	-	-	-
11-Nov-02	11:30	0.0	-	0.0	0.0	60	138	-	-	30	4	-	-	-	-	-
2-Dec-02	13:30	0.0	-	0.0	0.0	30	124	-	-	30	4	-	-	-	-	-
13-Dec-02	15:00	0.0	-	0.0	0.0	40	138	-	-	32	4	-	-	-	-	-
17-Dec-02	15:30	0.0	-	0.0	0.0	35	1220	450	1150	32	4	-	-	-	-	-
27-Dec-02	15:45	0.0	-	0.0	0.0	35	122	-	-	32	4	-	-	-	-	-
31-Dec-02	15:30	0.0	0.0	0.0	0.0	40	128	-	-	32	3	-	-	-	-	-
10-Jan-03	14:00	0.0	-	0.0	0.0	10	116	-	-	32	2	-	-	-	-	-
20-Jan-03	10:30	0.0	-	0.0	0.0	35	116	-	-	32	1	-	-	-	-	-
26-Jan-03	10:30	0.0	-	0.0	0.0	35	118	-	-	32	1	-	-	-	-	-
28-Jan-03	12:45	0.0	0.0	0.0	0.0	30	120	-	-	34	2	-	-	-	-	-
7-Feb-03	16:00	0.0	-	0.0	0.0	30	-	-	-	-	-	-	-	-	-	-
10-Feb-03	11:30	0.0	-	0.0	0.0	35	128	-	-	34	3	-	-	-	-	-
21-Feb-03	12:00	0.0	-	0.0	0.0	40	-	-	-	-	-	-	-	-	-	-
26-Feb-03	13:00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17-Mar-03	13:30	0.0	-	0.0	0.0	50	120	500	1250	9	3	-	-	-	-	-
18-Mar-03	11:00	0.0	-	0.0	0.0	55	120	500	1250	9	3	-	-	-	-	-
24-Mar-03	13:30	0.0	-	0.0	0.0	55	120	500	1250	9	3	-	-	-	-	-
25-Mar-03	13:30	0.0	-	0.0	0.0	60	135	500	1250	9	3	-	-	-	-	-
26-Mar-03	15:00	0.0	-	0.0	0.0	39	120	-	-	9	2	-	-	-	-	-
31-Mar-03	12:30	0.0	0.0	0.0	0.0	45	122	500	1250	9	3	-	-	-	-	-
4-Apr-03	17:30	-	-	-	-	45	-	300	>6000	5	0	-	-	-	-	-
7-Apr-03	12:20	0.0	-	0.0	0.0	45	-	-	-	4	0	-	-	-	-	-
8-Apr-03	12:00	-	-	-	-	-	-	-	-	3	0	-	-	-	-	-
9-Apr-03	14:00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11-Apr-03	17:00	-	-	-	-	60	-	-	-	9.5	5	-	-	-	-	-
14-Apr-03	17:30	-	-	-	-	50	135	490	1400	9.5	5	-	-	-	-	-
17-Apr-03	16:00	0.0	-	0.0	0.0	60	140	-	-	9.5	5	-	-	-	-	-
25-Apr-03	13:55	-	-	-	-	50	125	-	-	9.5	5	-	-	-	-	-
28-Apr-03	7:30	0.0	0.0	0.0	0.0	45	130	-	-	9.5	5	-	-	-	-	-
5-May-03	16:30	0.0	-	0.0	0.0	45	-	-	-	-	-	-	-	-	-	-

See end of table for Notes & Abbreviations.

TABLE III
SUB-SLAB VENTING SYSTEM MONITORING DATA
129 COMMERCIAL STREET, PARCEL B OF FORMER MANUFACTURED GAS PLANT SITE
MALDEN, MASSACHUSETTS

Monitoring Date	Time	Influent Total VOC Concentrations		Effluent Total VOC Concentrations		Outdoor Ambient Air Temp. (°F)	Outlet Vapor Temp. (°F)	Flow Velocity (ft./min)		System Vacuum (in. water)		Vacuum at Extraction Points (in. water)					
		PID (ppm)	H&A GC (ug/L)	Effluent - 1 (ppm)	Effluent - 2 (ppm)			Influent	Effluent	Blower	Knockout Drum	Discharge	EP-1	EP-2	EP-3	EP-4	EP-5
14-May-03	12:00	0.0	-	0.0	0.0	60	135	-	-	9.5	5	40	-	-	-	-	-
21-May-03	15:00	0.0	-	0.0	0.0	55	140	-	-	10	5	40	-	-	-	-	-
29-May-03	14:20	0.0	ND	0.0	0.0	65	145	480	1400	10	5	40	-	-	-	-	-
6-Jun-03	11:30	0.0	-	0.0	0.0	70	150	-	-	10	5	40	-	-	-	-	-
9-Jun-03	16:00	0.0	-	0.0	0.0	65	140	480	1450	10	5	40	-	-	-	-	-
12-Jun-03	17:20	-	-	-	-	-	-	480	1400	10	5	40	-	-	-	-	-
19-Jun-03	15:30	0.0	-	0.0	0.0	75	135	480	1400	10	5	40	-	-	-	-	-
26-Jun-03	10:45	0.0	-	0.0	0.0	85	150	480	1400	11	5	38	-	-	-	-	-
30-Jun-03	7:00	-	ND	-	-	75	160	480	1400	10	5	40	-	-	-	-	-
7-Jul-03	10:00	-	-	-	-	90	75	480	1400	10	5	40	-	-	-	-	-
16-Jul-03	14:15	0.0	-	0.0	0.0	75	70	480	1400	10	5	40	-	-	-	-	-
17-Jul-03	14:15	-	-	-	-	90	162	480	1400	10	5	40	-	-	-	-	-
18-Jul-03	17:00	-	-	-	-	90	160	480	1400	10	5	40	-	-	-	-	-
21-Jul-03	18:00	0.0	-	0.0	0.0	90	156	480	1400	10	5	40	-	-	-	-	-
23-Jul-03	17:30	-	-	-	-	85	160	480	1400	10	5	40	-	-	-	-	-
31-Jul-03	18:30	-	ND	-	-	80	143	480	1400	10	5	41	-	-	-	-	-
6-Aug-03	14:10	0.0	-	0.0	0.0	90	160	480	1400	10	5	40	-	-	-	-	-
14-Aug-03	16:30	-	-	-	-	75	155	480	1400	10	5	40	-	-	-	-	-
22-Aug-03	14:00	-	ND	-	-	95	160	480	1400	10	5	40	-	-	-	-	-
30-Aug-03	7:30	0.0	-	0.0	0.0	80	155	480	1400	10	5	40	-	-	-	-	-
10-Sep-03	13:00	-	-	-	-	75	154	480	1400	10	5	42	-	-	-	-	-
18-Sep-03	17:30	0.0	-	0.0	0.0	75	146	480	1400	10	5	42	-	-	-	-	-
26-Sep-03	17:00	-	-	-	-	75	145	480	1400	10	5	42	-	-	-	-	-
30-Sep-03	10:05	0.0	ND	0.0	0.0	70	134	480	1400	9.5	5	42	1	1	1	0	1
6-Oct-03	14:00	0.0	-	0.0	0.0	60	137	500	1400	9	5	42	-	-	-	-	-
17-Oct-03	8:30	0.0	-	0.0	0.0	50	120	500	1500	9	4	43	-	-	-	-	-
21-Oct-03	14:00	0.0	-	0.0	0.0	60	132	375	1400	9	4	41	-	-	-	-	-
28-Oct-03	15:00	0.0	ND	0.0	0.0	60	126	450	1400	9	4	42	-	-	-	-	-
6-Nov-03	17:00	0.0	-	0.0	0.0	60	122	350	1400	9.5	4	43	-	-	-	-	-
10-Nov-03	13:45	0.0	-	0.0	0.0	50	125	400	1500	9	4	44	-	-	-	-	-
17-Nov-03	19:00	0.0	-	0.0	0.0	-	124	480	1500	10	5	42	-	-	-	-	-
26-Nov-03	12:00	0.0	-	0.0	0.0	45	117	400	1500	9.5	5	44	-	-	-	-	-
30-Nov-03	8:50	0.0	ND	0.0	0.0	40	108	510	1500	9	3	42	-	-	-	-	-
4-Dec-03	14:00	0.0	-	0.0	0.0	-	110	500	1500	9	2	44	-	-	-	-	-
11-Dec-03	13:40	0.0	-	0.0	0.0	50	108	500	1500	9	2	44	-	-	-	-	-
18-Dec-03	10:15	0.0	ND	0.0	0.0	30	104	500	1500	9	2	44	-	-	-	-	-
24-Dec-03	16:00	0.0	-	0.0	0.0	50	109	480	1500	10	4	44	-	-	-	-	-
6-Jan-04	11:15	0.0	-	0.0	0.0	35	108	480	1500	9	3	44	-	-	-	-	-
22-Jan-04	10:00	0.0	ND	0.0	0.0	30	87	400	1450	9.5	2.5	44	-	-	-	-	-
27-Jan-04	16:15	0.0	-	0.0	0.0	5	94	400	1500	9.5	2.5	44	-	-	-	-	-
3-Feb-04	7:00	0.0	-	0.0	0.0	30	98	450	1500	10	2.5	44	-	-	-	-	-
12-Feb-04	10:00	0.0	-	0.0	0.0	25	99	450	1500	10	2	44	-	-	-	-	-
19-Feb-04	18:30	0.0	-	0.0	0.0	30	108	400	1500	10	2.5	44	-	-	-	-	-

See end of table for Notes & Abbreviations.

TABLE III
SUB-SLAB VENTING SYSTEM MONITORING DATA
129 COMMERCIAL STREET, PARCEL B OF FORMER MANUFACTURED GAS PLANT SITE
MALDEN, MASSACHUSETTS

Monitoring Date	Time	Influent Total VOC Concentrations		Effluent Total VOC Concentrations		Outdoor Ambient Air Temp. (°F)	Outlet Vapor Temp. (°F)	Flow Velocity (ft./min)		System Vacuum (in. water)		Vacuum at Extraction Points (in. water)				
		PID (ppm)	H&A GC (ug/L)	Effluent - 1 (ppm)	Effluent - 2 (ppm)			Influent	Effluent	Blower	Knockout Drum	EP-1	EP-2	EP-3	EP-4	EP-5
24-Feb-04	8:30	0.0	ND	0.0	0.0	30	104	500	1500	10	2	-	-	-	-	-
2-Mar-04	7:30	0.0	-	0.0	0.0	40	110	475	1500	10	2	-	-	-	-	-
12-Mar-04	5:50	0.0	-	0.0	0.0	30	108	450	1500	10	2	-	-	-	-	-
19-Mar-04	18:00	0.0	-	0.0	0.0	-	100	450	1500	10	2	-	-	-	-	-
23-Mar-04	16:00	0.0	-	0.0	0.0	40	110	500	1500	10.5	2	-	-	0	0	1
31-Mar-04	5:45	0.0	ND	0.0	0.0	30	110	410	1500	10.5	2	-	-	-	-	-
8-Apr-04	5:15	0.0	-	0.0	0.0	30	110	400	1500	10	2	-	-	-	-	-
16-Apr-04	5:50	0.0	-	0.0	0.0	40	110	500	1550	11	2	-	-	-	-	-
21-Apr-04	18:15	0.0	-	0.0	0.0	50	98	500	1500	10	4	-	-	-	-	-
28-Apr-04	9:30	0.0	14.0	0.0	0.0	50	96	475	1550	10	2	-	-	-	-	-
7-May-04	6:00	0.0	-	0.0	0.0	50	95	400	1575	11	2	-	-	-	-	-
14-May-04	16:00	0.0	-	0.0	0.0	70	98	400	1575	11	2	-	-	-	-	-
17-May-04	10:00	-	-	-	-	60	96	-	-	11	2	-	-	-	-	-
18-May-04	9:00	-	-	-	-	60	140	-	-	11	2	-	-	-	-	-
19-May-04	8:15	-	-	-	-	60	140	-	-	11	2	-	-	-	-	-
20-May-04	11:30	0.0	-	0.0	0.0	80	148	-	-	11	2	-	-	-	-	-
28-May-04	11:00	0.0	ND	0.0	0.0	50	123	300	1200	11	2	-	-	-	-	-
4-Jun-04	17:15	0.0	-	0.0	0.0	80	137	250	1100	11.5	6	-	-	-	-	-
8-Jun-04	17:20	0.0	-	0.0	0.0	80	130	-	-	11.5	6	-	-	-	-	-
10-Jun-04	18:45	0.0	-	0.0	0.0	80	142	375	1200	11	5	-	-	-	-	-
17-Jun-04	14:00	0.0	-	0.0	0.0	90	150	375	1200	11	5	-	-	-	-	-
5-Jul-04	5:00	0.0	-	0.0	0.0	80	132	400	1200	11	5	-	-	-	-	-
21-Jun-04	5:00	0.0	ND	0.0	0.0	80	144	400	1200	11	5	-	-	-	-	-
29-Jun-04	12:30	0.0	-	0.0	0.0	80	140	425	1200	11	5	-	-	-	-	-
9-Jul-04	6:45	0.0	-	0.0	0.0	70	140	400	1200	11	5	-	-	-	-	-
16-Jul-04	5:15	0.0	-	0.0	0.0	70	140	475	1250	11.5	5	-	-	-	-	-
23-Jul-04	5:00	0.0	-	0.0	0.0	70	116	475	1250	11.5	5	-	-	-	-	-
30-Jul-04	10:00	0.0	ND	0.0	0.0	80	132	500	1250	11.5	5	-	-	-	-	-
5-Aug-04	5:00	0.0	-	0.0	0.0	70	140	500	1250	11.5	5	-	-	-	-	-
10-Aug-04	18:15	0.0	-	0.0	0.0	80	120	500	1250	11.5	5	-	-	-	-	-
19-Aug-04	6:00	0.0	-	0.0	0.0	80	124	350	1250	12	5	-	-	-	-	-
29-Aug-04	5:45	0.0	-	0.0	0.0	70	114	300	1250	11	5	-	-	-	-	-
31-Aug-04	11:20	0.0	ND	0.0	0.0	90	132	350	1250	11.5	5.5	-	-	-	-	-
10-Sep-04	6:15	0.0	-	0.0	0.0	60	122	325	1300	12	5	-	-	-	-	-
13-Sep-04	13:10	0.0	ND	0.0	0.0	80	122	375	1250	11.5	5	-	-	-	-	-
14-Sep-04	5:50	0.0	-	0.0	0.0	60	122	375	1250	11	5	-	-	-	-	-
23-Sep-04	18:30	0.0	-	0.0	0.0	80	143	350	1250	11	5	-	-	-	-	-
28-Sep-04	18:30	0.0	-	0.0	0.0	40	100	300	1250	11	5	-	-	-	-	-
7-Oct-04	5:45	0.0	-	0.0	0.0	50	110	500	1250	11	5	-	-	-	-	-
14-Oct-04	6:20	0.0	-	0.0	0.0	40	98	300	1250	11	5	-	-	-	-	-
21-Oct-04	6:00	0.0	-	0.0	0.0	70	112	300	1250	11	5	-	-	-	-	-
27-Oct-04	18:00	0.0	ND	0.0	0.0	60	98	475	1250	11	5	-	-	-	-	-
4-Nov-04	9:15	0.0	-	0.0	0.0	60	98	475	1250	11	5	-	-	-	-	-
11-Nov-04	8:00	0.0	-	0.0	0.0	40	98	325	1250	11	5	-	-	-	-	-

See end of table for Notes & Abbreviations.

TABLE III
SUB-SLAB VENTING SYSTEM MONITORING DATA
129 COMMERCIAL STREET, PARCEL B OF FORMER MANUFACTURED GAS PLANT SITE
MALDEN, MASSACHUSETTS

Monitoring Date	Time	Influent Total VOC Concentrations		Effluent Total VOC Concentrations		Outdoor Ambient Air Temp. (°F)	Outlet Vapor Temp. (°F)	Flow Velocity (ft./min)		System Vacuum (in. water)			Vacuum at Extraction Points (in. water)				
		PID (ppm)	HRA GC (ug/L)	Effluent - 1 (ppm)	Effluent - 2 (ppm)			Influent	Effluent	Blower	Knockout Drum	Discharge	EP-1	EP-2	EP-3	EP-4	EP-5
15-Nov-04	10:00	0.0	-	0.0	0.0	40	100	475	1250	11	5	41	-	-	-	-	-
26-Nov-04	9:00	0.0	-	0.0	0.0	50	100	450	1250	11	5	41	-	-	-	-	-
30-Nov-04	15:30	0.0	ND	0.0	0.0	40	98	400	1250	11	4.5	41	-	-	-	-	-
6-Dec-04	11:40	0.0	-	0.0	0.0	20	85	400	1250	11	4.5	42	-	-	-	-	-
16-Dec-04	6:00	0.0	-	0.0	0.0	10	78	400	1250	11	4	41	-	-	-	-	-
20-Dec-04	14:45	0.0	ND	0.0	0.0	10	76	400	1250	11	4	41	-	-	-	-	-
29-Dec-04	17:45	0.0	-	0.0	0.0	30	84	400	1250	11	4	41	-	-	-	-	-
7-Jan-05	5:30	0.0	-	0.0	0.0	20	88	300	1250	11	4	41	-	-	-	-	-
13-Jan-05	5:15	0.0	-	0.0	0.0	30	86	400	1250	11	4	42	-	-	-	-	-
20-Jan-05	6:20	0.0	-	0.0	0.0	10	76	400	1250	11	4	41	-	-	-	-	-
25-Jan-05	12:15	0.0	ND	0.0	0.0	20	90	-	-	9	3	37	-	-	-	-	-
2-Feb-05	14:30	0.0	-	0.0	0.0	30	88	400	-	5	5	41	-	-	-	-	-
7-Feb-05	11:20	0.0	-	0.0	0.0	40	96	400	-	9	5	40	-	-	-	-	-
17-Feb-05	5:15	0.0	-	0.0	0.0	20	86	400	-	5	5	40	-	-	-	-	-
24-Feb-05	11:45	0.0	-	0.0	0.0	30	85	400	1250	9	5	42	-	-	-	-	-
28-Feb-05	5:15	0.0	ND	0.0	0.0	20	78	350	1200	9	4.5	42	-	-	-	-	-
9-Mar-05	7:45	0.0	-	0.0	0.0	10	70	-	-	9.5	4	41	-	-	-	-	-
15-Mar-05	14:30	0.0	-	0.0	0.0	40	100	350	1200	10	5	42	-	-	-	-	-
21-Mar-05	5:10	0.0	ND	0.0	0.0	30	92	350	1200	11	5	42	-	-	-	-	-
30-Mar-05	10:30	0.0	-	0.0	0.0	50	108	200	1200	11	5	42	-	-	-	-	-
6-Apr-05	5:20	0.0	-	0.0	0.0	40	100	350	1200	12	5	41	-	-	-	-	-
12-Apr-05	18:30	0.0	-	0.0	0.0	40	92	400	1225	11.5	5	42	-	-	-	-	-
20-Apr-05	5:45	0.0	-	0.0	0.0	40	111	300	1200	11.5	4.5	41	-	-	-	-	-
21-Apr-05	6:00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25-Apr-05	11:00	0.0	ND	0.0	0.0	40	105	300	1200	11.5	5	41	-	-	-	-	-
6-May-05	5:45	0.0	-	0.0	0.0	40	98	350	1200	11.5	4.5	42	-	-	-	-	-
13-May-05	5:30	0.0	-	0.0	0.0	40	96	350	1200	11.5	4.5	41	-	-	-	-	-
18-May-05	5:30	0.0	-	0.0	0.0	40	104	350	1200	11.5	4.5	41	-	-	-	-	-
25-May-05	14:30	0.0	-	0.0	0.0	40	99	400	1200	11.5	4.5	41	-	-	-	-	-
31-May-05	5:00	0.0	-	0.0	0.0	40	104	400	1200	11.5	4.5	41	-	-	-	-	-
7-Jun-05	5:30	0.0	-	0.0	0.0	60	120	350	1200	12	5	40	-	-	-	-	-
14-Jun-05	5:00	0.0	-	0.0	0.0	80	108	350	1200	12	5	40	-	-	-	-	-
23-Jun-05	8:30	0.0	-	0.0	0.0	80	118	300	1100	12	5	40	-	-	-	-	-
27-Jun-05	5:15	0.0	8.0	0.0	0.0	80	94	300	1100	12	5	40	-	-	-	-	-
28-Jun-05	5:20, 11:20	0.0	-	0.0	0.0	90	132	400	1150	12	5	40	-	-	-	-	-
5-Jul-05	5:30	0.0	-	0.0	0.0	70	100	300	1250	12	5	40	-	-	-	-	-
12-Jul-05	5:30	0.0	-	0.0	0.0	60	100	300	1200	12	5	40	-	-	-	-	-
18-Jul-05	5:30	0.0	-	0.0	0.0	80	116	300	1200	12	5	40	-	-	-	-	-
20-Jul-05	5:00, 17:30	-	-	-	-	90	136	-	-	-	-	-	-	-	-	-	-
21-Jul-05	6:00	0.0	ND	0.0	0.0	70	148	325	1000	12	5	40	-	-	-	-	-
25-Jul-05	7:00	0.0	-	0.0	0.0	70	108	300	1100	12	5	40	-	-	-	-	-
27-Jul-05	7:15	0.0	-	0.0	0.0	80	120	250	1250	12	5	39	-	-	-	-	-
2-Aug-05	5:30	-	-	-	-	80	-	-	-	-	-	-	-	-	-	-	-

See end of table for Notes & Abbreviations.

TABLE III
SUB-SLAB VENTING SYSTEM MONITORING DATA
129 COMMERCIAL STREET, PARCEL B OF FORMER MANUFACTURED GAS PLANT SITE
MALDEN, MASSACHUSETTS

Monitoring Date	Time	Influent Total VOC Concentrations		Effluent Total VOC Concentrations		Outdoor Ambient Air Temp. (°F)	Outlet Vapor Temp. (°F)	Flow Velocity (ft./min)		System Vacuum (in. water)		Vacuum at Extraction Points (in. water)						
		PID (ppm)	H&A GC (ug/L)	Effluent - 1 (ppm)	Effluent - 2 (ppm)			Influent	Effluent	Blower	Knockout Drum	Discharge	EP-1	EP-2	EP-3	EP-4	EP-5	
4-Aug-05	11:00	0.0	-	0.0	0.0	80	132	350	1200	12	5	40	Electrician replaced system control panel parts; restart	-	-	-	-	-
8-Aug-05	19:15	0.0	-	0.0	0.0	80	140	350	1200	12	5	40		-	-	-	-	-
16-Aug-05	6:00	0.0	-	0.0	0.0	70	134	400	1200	12	5	40		-	-	-	-	-
24-Aug-05	5:30	0.0	-	0.0	0.0	70	132	-	-	12	5	41		-	-	-	-	-
31-Aug-05	10:45	0.0	ND	0.0	0.0	80	134	-	-	12	5	40		-	-	-	-	-
7-Sep-05	5:30	0.0	-	0.0	0.0	60	125	-	-	12	5	40		-	-	-	-	-
16-Sep-05	5:30	0.0	-	0.0	0.0	70	124	-	-	12	5	40		-	-	-	-	-
23-Sep-05	5:30	0.0	-	0.0	0.0	70	124	-	-	12	5	40		-	-	-	-	-
26-Sep-05	7:15	0.0	-	0.0	0.0	70	123	450	1300	12	5	40		0.1	1.5	1.75	0.4	1.5
7-Oct-05	5:30	0.0	-	0.0	0.0	70	124	500	1400	12	5	40		-	-	-	-	-
12-Oct-05	6:00	0.0	-	0.0	0.0	40	122	500	1300	12	5	40	-	-	-	-	-	
19-Oct-05	7:00	0.0	-	0.0	0.0	50	123	400	1250	12	5	41	-	-	-	-	-	
28-Oct-05	5:30	0.0	-	0.0	0.0	30	120	400	1250	12	5	40	-	-	-	-	-	
31-Oct-05	5:15	0.0	ND	0.0	0.0	40	120	400	1250	12	5	40	-	-	-	-	-	
8-Nov-05	6:00	0.0	-	0.0	0.0	40	120	500	1300	12	5	40	-	-	-	-	-	
16-Nov-05	12:30	0.0	-	0.0	0.0	50	122	475	1250	12	5	40	-	-	-	-	-	
21-Nov-05	5:30	0.0	-	0.0	0.0	50	121	450	1250	12	5	40	-	-	-	-	-	
30-Nov-05	5:00	0.0	ND	0.0	0.0	50	120	450	1250	12	5	40	-	-	-	-	-	
7-Dec-05	9:00	0.0	-	0.0	0.0	30	108	450	1400	12	5	41	-	-	-	-	-	
15-Dec-05	5:30	0.0	-	0.0	0.0	20	115	400	1300	12	5	40	-	-	-	-	-	
19-Dec-05	12:40	0.0	-	0.0	0.0	30	116	400	1300	12	5	40	-	-	-	-	-	
29-Dec-05	9:30	0.0	ND	0.0	0.0	40	120	450	1400	12	5	40	-	-	-	-	-	
2-Jan-06	10:30	0.0	-	0.0	0.0	30	114	450	1300	12	5	40	-	-	-	-	-	
11-Jan-06	5:30	0.0	-	0.0	0.0	50	120	450	1400	12	5	40	-	-	-	-	-	
20-Jan-06	5:30	0.0	-	0.0	0.0	30	118	450	1400	12	5	40	-	-	-	-	-	
25-Jan-06	10:15	0.0	ND	0.0	0.0	40	118	500	1400	12	5	40	-	-	-	-	-	
4-Feb-06	5:30	0.0	-	0.0	0.0	40	120	475	1400	12	5	40	-	-	-	-	-	
7-Feb-06	9:45	0.0	-	0.0	0.0	40	112	475	1400	12	5	40	-	-	-	-	-	
16-Feb-06	12:00	0.0	-	0.0	0.0	50	118	450	1400	12	5	40	-	-	-	-	-	
24-Feb-06	5:30	0.0	-	0.0	0.0	20	105	450	1400	12	5	40	-	-	-	-	-	
27-Feb-06	9:50	0.0	ND	0.0	0.0	10	98	450	1400	12	5	41	0.04	0.9	0.5	0.7	1.8	
7-Mar-06	6:45	0.0	-	0.0	0.0	30	113	450	1450	11.5	4.5	41	New blower unit installed in system trailer on 7-Mar-06					
8-Mar-06	9:45	0.0	-	0.0	0.0	40	100	400	1450	10	4	40	0.04	0.85	0.4	0.6	1.6	
16-Mar-06	5:45	0.0	-	0.0	0.0	30	110	400	1400	10	4	40	-	-	-	-	-	
24-Mar-06	15:00	0.0	-	0.0	0.0	50	123	400	1400	10	5	40	-	-	-	-	-	
27-Mar-06	14:10	0.0	-	0.0	0.0	50	134	400	1500	10	4	40	-	-	-	-	-	
31-Mar-06	8:45	0.0	ND	0.0	0.0	50	118	400	1500	10	4.5	40	-	-	-	-	-	
6-Apr-06	5:30	0.0	-	0.0	0.0	50	115	400	1500	10	5	40	-	-	-	-	-	
10-Apr-06	15:15	0.0	-	0.0	0.0	50	90	400	1500	10	5	40	-	-	-	-	-	
25-Apr-06	8:00	0.0	ND	0.0	0.0	50	121	375	1400	10	5	40	-	-	-	-	-	
31-May-06	13:15	0.0	ND	0.0	0.0	80	140	350	1400	10	4.5	40	-	-	-	-	-	
2-Jun-06	10:30	0.0	ND	0.0	0.0	70	139	400	1250	10	5	40	-	-	-	-	-	

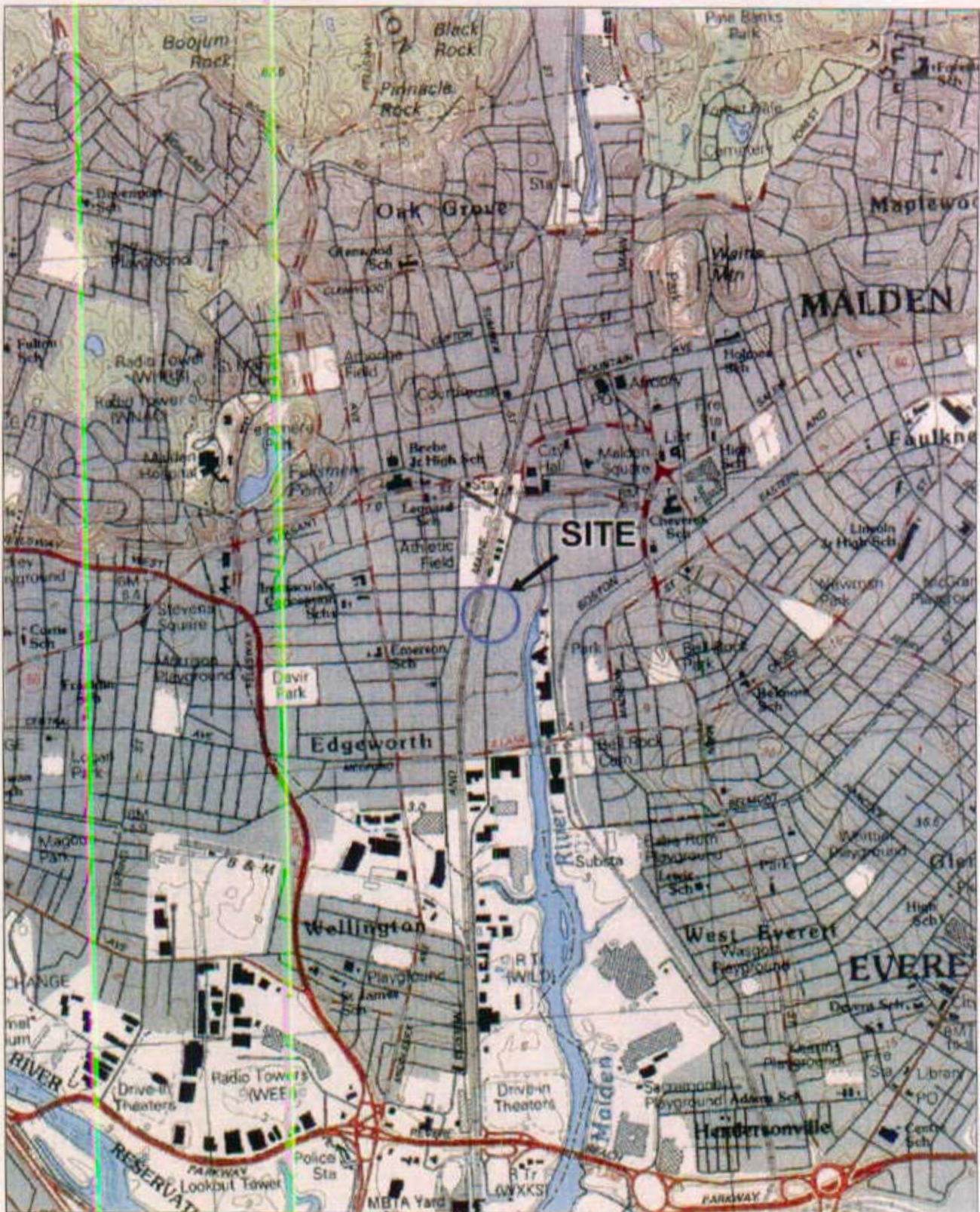
See end of table for Notes & Abbreviations.

TABLE III
SUB-SLAB VENTING SYSTEM MONITORING DATA
 129 COMMERCIAL STREET, PARCEL B OF FORMER MANUFACTURED GAS PLANT SITE
 MALDEN, MASSACHUSETTS

Monitoring Date	Time	Influent Total VOC Concentrations		Effluent Total VOC Concentrations		Outdoor Ambient Air Temp. (°F)	Outlet Vapor Temp. (°F)	Flow Velocity (ft./min)		System Vacuum (in. water)		Vacuum at Extraction Points (in. water)						
		PID (ppm)	H&A GC (ug/L)	Effluent - 1 (ppm)	Effluent - 2 (ppm)			Influent	Effluent	Blower	Knockout Drum	Discharge	EP-1	EP-2	EP-3	EP-4	EP-5	
27-Jul-06	6:00	0.0	ND	0.0	0.0	80	135	300	1250	11	5	41.5	-	-	-	-	-	-
31-Aug-06	5:30	0.0	ND	0.0	0.0	80	120	300	1250	10	5	47	-	-	-	-	-	-
16-Sep-06	16:05	-	-	-	-	60	100	-	-	11	5	44	-	-	-	-	-	-
20-Sep-06	9:30	-	-	-	-	70	123	300	1250	10	5	43	-	-	-	-	-	-
26-Sep-06	5:30	0.0	0.0	0.0	0.0	50	132	400	1300	10	5	45	-	-	-	-	-	-
30-Oct-06	12:15	0.0	0.0	0.0	0.0	40	126	500	1400	10	5	44	-	-	-	-	-	-
1-Nov-06	11:30	-	-	-	-	-	126	-	-	10	5	44	-	-	-	-	-	-
28-Nov-06	5:30	0.0	0.0	0.0	0.0	50	120	350	1400	10	5	48	-	-	-	-	-	-
19-Dec-06	5:30	0.0	0.0	0.0	0.0	30	88	350	1350	10	4	49	-	-	-	-	-	-
25-Jan-07	9:00	0.0	0.0	0.0	0.0	30	90	400	1400	10	3	50	-	-	-	-	-	-
22-Feb-07	13:15	-	-	-	-	40	-	-	-	-	-	-	-	-	-	-	-	-
28-Feb-07	14:15	0.0	0.0	0.0	0.0	40	134	350	1400	10	5	46	-	-	-	-	-	-
14-Mar-07	5:45	0.0	0.0	0.0	0.0	40	130	350	1400	10	5	46	-	-	-	-	-	-
27-Apr-07	5:45	0.0	0.0	0.0	0.0	45	110	400	1400	10	5	48	-	-	-	-	-	-
30-May-07	5:30	0.0	0.0	0.0	0.0	50	104	400	1500	10	5	48	-	-	-	-	-	-
19-Jun-07	10:30	-	-	-	-	90	-	-	-	-	-	-	-	-	-	-	-	-
27-Jun-07	10:30, 13:10	0.0	0.0	0.0	0.0	95	150	400	1500	11	5	46	-	-	-	-	-	-
28-Jun-07	-	-	-	-	-	85	-	-	-	-	-	-	-	-	-	-	-	-
9-Jul-07	10:30	-	-	-	-	80	-	-	-	-	-	-	-	-	-	-	-	-
31-Jul-07	14:30	0.0	0.0	0.0	0.0	80	120	450	1700	11	5	46	-	-	-	-	-	-
3-Aug-07	-	-	-	-	-	90	-	-	-	-	-	-	-	-	-	-	-	-
14-Aug-07	14:40	-	-	-	-	85	132	500	2000	10	5	46	-	-	-	-	-	-
16-Aug-07	3:25	-	-	-	-	85	158	500	1500	10	5	46	-	-	-	-	-	-
17-Aug-07	11:00	-	-	-	-	75	146	300	1250	10	5	49	-	-	-	-	-	-
23-Aug-07	10:20	-	-	-	-	65	136	250	1250	10	5	48	-	-	-	-	-	-
28-Aug-07	14:54	-	-	-	-	75	130	350	1400	11	5	48	-	-	-	-	-	-
30-Aug-07	9:00	0.0	0.0	0.0	0.0	78	132	500	2000	10	3	46	-	-	-	-	-	-
4-Sep-07	-	-	-	-	-	75	-	-	-	-	-	-	-	-	-	-	-	-
5-Sep-07	10:26	-	-	-	-	70	116	700	1500	10	3	48	-	-	-	-	-	-
7-Sep-07	10:20	-	-	-	-	95	120	350	1250	11	5	45	-	-	-	-	-	-
10-Sep-07	7:40	-	-	-	-	60	105	450	1500	11	5	48	-	-	-	-	-	-

Notes & Abbreviations:

1. Samples analyzed for benzene, toluene, ethylbenzene, m&p xylene, o xylene, and styrene by gas chromatograph at the Haley & Aldrich, Inc. Laboratory in Boston, Massachusetts.
2. - = Not Available/Not Measured
3. ND = Non Detect, method detection limit < 1ug/L



SITE COORDINATES: 42°25'21"N 71°4'30"W

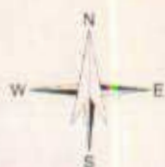
HALEY & ALDRICH

FORMER MALDEN MGP SITE, PARCEL B
129 COMMERCIAL STREET
MALDEN, MASSACHUSETTS

PROJECT LOCUS

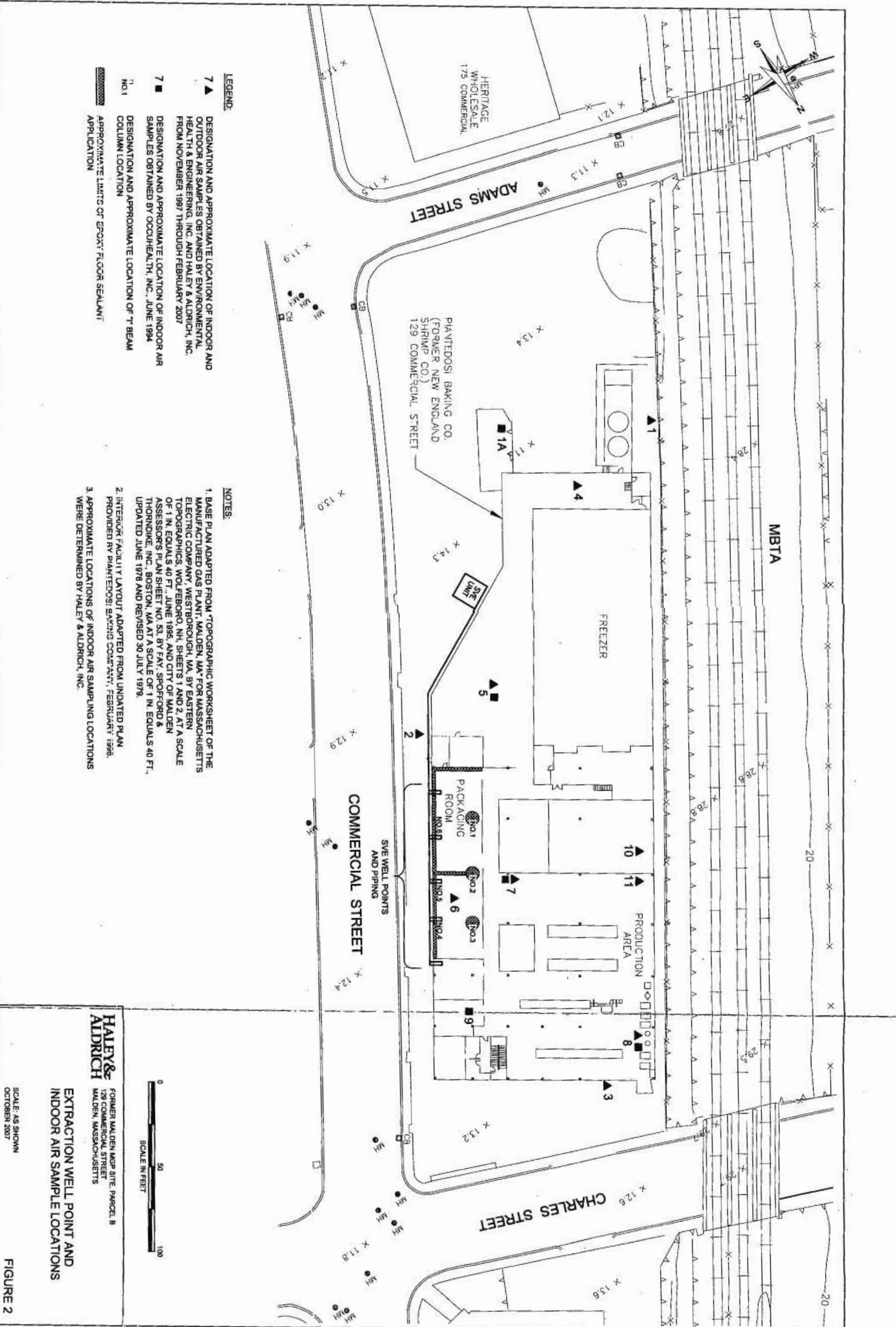
SCALE: 1:24,000
OCTOBER 2007

FIGURE 1



U.S.G.S. QUADRANGLE: BOSTON NORTH, MA

06558-754 1.FD0F



LEGEND:

7 ▲ DESIGNATION AND APPROXIMATE LOCATION OF INDOOR AND OUTDOOR AIR SAMPLES OBTAINED BY ENVIRONMENTAL HEALTH & ENGINEERING, INC. AND HALEY & ALDRICH, INC. FROM NOVEMBER 1987 THROUGH FEBRUARY 2007

7 ■ DESIGNATION AND APPROXIMATE LOCATION OF INDOOR AIR SAMPLES OBTAINED BY OCCUHEALTH, INC., JUNE 1994

11 ■ DESIGNATION AND APPROXIMATE LOCATION OF "T" BEAM COLUMN LOCATION

■ APPROXIMATE LIMITS OF EXIST' FLOOR SEALANT APPLICATION

NOTES:

1. BASE PLAN ADAPTED FROM "TOPOGRAPHIC WORKSHEET OF THE MANUFACTURED GAS PLANT, MALDEN, MA" FOR MASSACHUSETTS ELECTRIC COMPANY, WESTBOROUGH, MA, BY EASTERN TOPOGRAPHICS, WOLFEBORO, NH, SHEETS 1 AND 2, AT A SCALE OF 1 IN. EQUALS 40 FT., JUNE 1985, AND CITY OF MALDEN ASSESSOR'S PLAN SHEET NO. 53, BY FAY, SPOFFORD & THORNDIKE, INC., BOSTON, MA AT A SCALE OF 1 IN. EQUALS 40 FT., UPDATED JUNE 1978 AND REVISED 30 JULY 1979.

2. INTERIOR FACILITY LAYOUT ADAPTED FROM UNDATED PLAN PROVIDED BY PIANTADOSI BAKING COMPANY, FEBRUARY 1996.

3. APPROXIMATE LOCATIONS OF INDOOR AIR SAMPLING LOCATIONS WERE DETERMINED BY HALEY & ALDRICH, INC.

HALEY & ALDRICH
FORMER MALDEN MGP SITE, PARCEL B
175 COMMERCIAL STREET
MALDEN, MASSACHUSETTS

EXTRACTION WELL POINT AND
INDOOR AIR SAMPLE LOCATIONS

SCALE: AS SHOWN
OCTOBER 2007

FIGURE 2

Figure 3 PID Measurements of Sub-Slab Vapor Influent

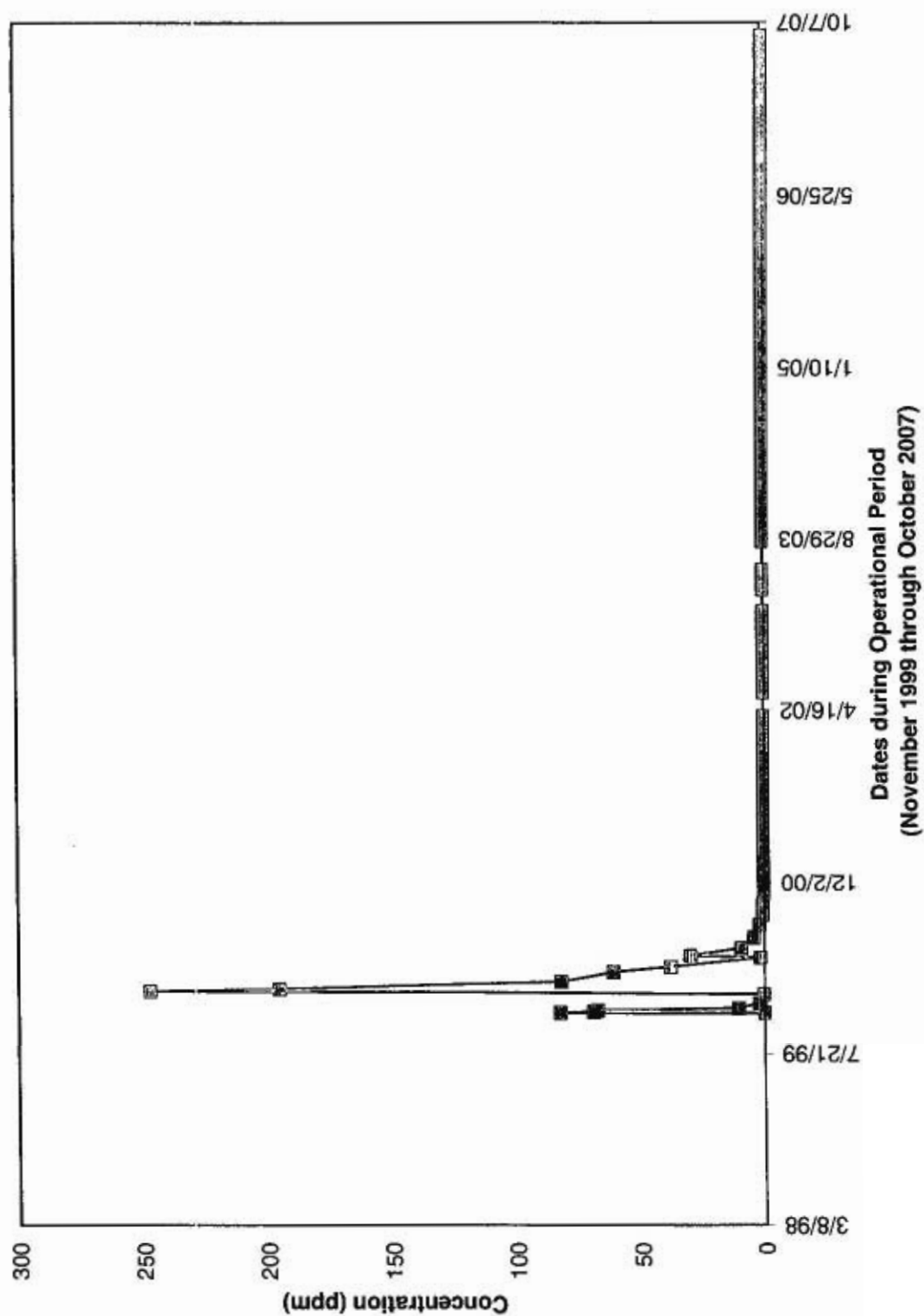
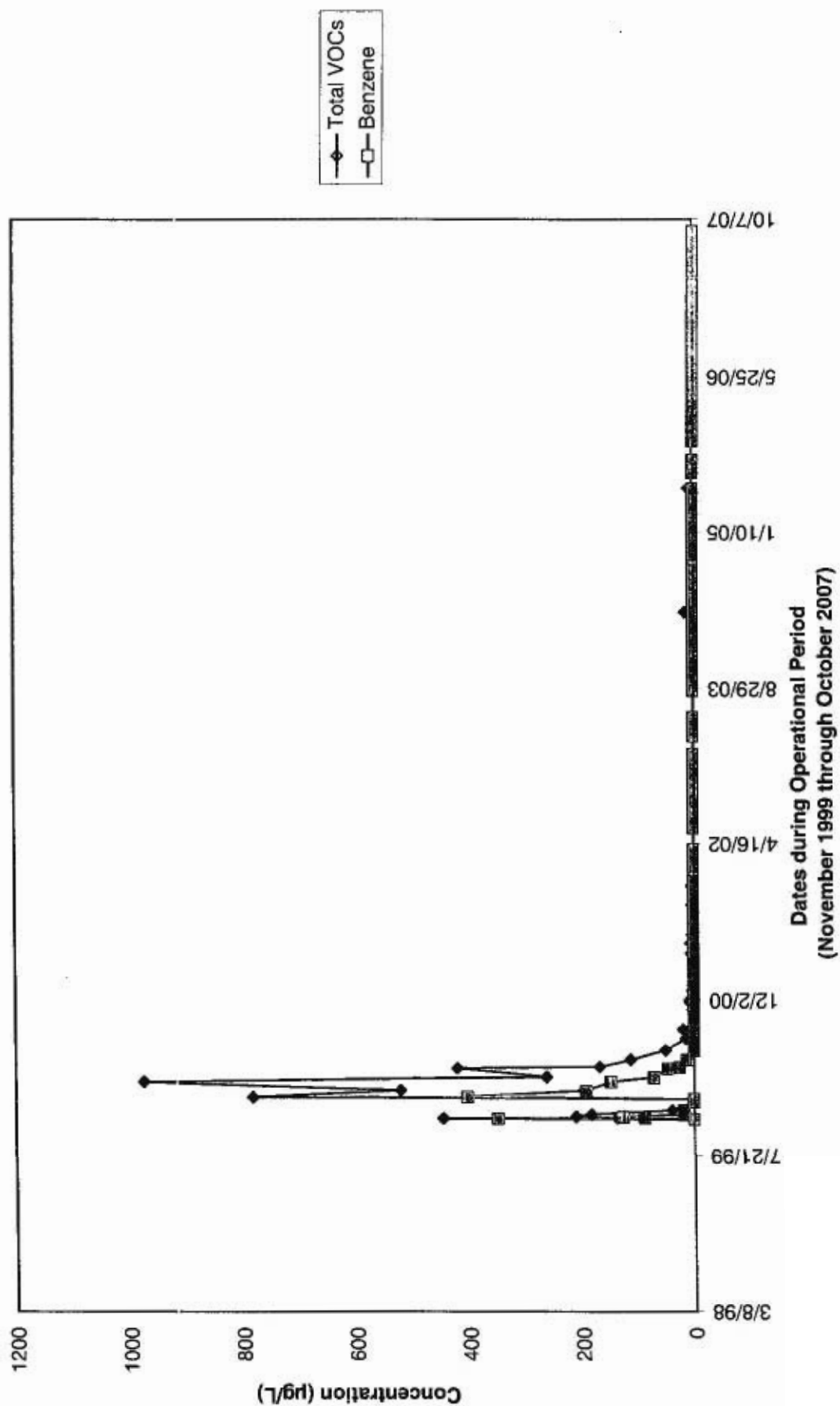


Figure 4 GC Analysis of Sub-Slab Vapor Influent



APPENDIX A

**Copy of Form BWSC-106 and
RAM Remedial Monitoring Report**



Massachusetts Department of Environmental Protection

eDEP Transaction Copy

Here is the file you requested for your records.

To retain a copy of this file you must save and/or print.

Username: **KMGROSS12**

Transaction ID: **146496**

Document: **BWSC - Release Abatement Measure Transmittal For**

Size of File: **180.06 K**

Status of Transaction: **SUBMITTED**

Date and Time Created: **10/5/2007::1:20:28 PM**

Note: This file only includes forms that were part of your transaction as of the date and time indicated above. If you need a more current copy of your transaction, return to eDEP and select to "Download a Copy" from the Current Submittals page.



Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC106

RELEASE ABATEMENT MEASURE (RAM)
TRANSMITTAL FORM

Release Tracking Number

3 - 362

Pursuant to 310 CMR 40.0444 - 0446 (Subpart D)

A. SITE LOCATION:

1. Site Name/Location Aid: **BOSTON GAS COMPANY MALDEN PLANT**
2. Street Address: **100 COMMERCIAL ST**
3. City/Town: **MALDEN**
4. ZIP Code: **02148-0000**
5. UTM Coordinates: a. UTM N: **4698895** b. UTM E: **670637**
- ☒ 6. Check here if a Tier Classification Submittal has been provided to DEP for this disposal site.
- ☐ a. Tier IA ☒ b. Tier IB ☐ c. Tier IC ☐ d. Tier II
7. If a Tier I Permit has been issued, provide Permit Number: **7378**

B. THIS FORM IS BEING USED TO: (check all that apply)

1. List Submittal Date of Initial RAM Plan (if previously submitted): **7/2/1998**
(mm/dd/yyyy)
- ☒ 2. Submit an Initial Release Abatement Measure (RAM) Plan.
- a. Check here if the RAM is being conducted as part of the construction of a permanent structure. If checked, you must specify what type of permanent structure is to be erected in or in the immediate vicinity of the area where the RAM is to be conducted.
- b. Specify type of permanent structure: (check all that apply) ☐ i. School ☐ ii. Residential ☐ iii. Commercial ☐ iv. Industrial ☐ v. Other Specify: _____
- ☐ 3. Submit a Modified RAM Plan of a previously submitted RAM Plan.
- ☒ 4. Submit a RAM Status Report.
- ☒ 5. Submit a Remedial Monitoring Report. (This report can only be submitted through eDEP, concurrent with a RAM Status Report.)
- a. Type of Report: (check one) ☐ i. Initial Report ☒ ii. Interim Report ☐ iii. Final Report
- b. Number of Remedial Systems and/or Monitoring Programs: **1**
- A separate BWSC106A, RAM Remedial Monitoring Report, must be filled out for each Remedial System and/or Monitoring Program addressed by this transmittal form.
- ☐ 6. Submit a RAM Completion Statement.
- ☐ 7. Submit a Revised RAM Completion Statement.
8. Provide Additional RTNs:
- a. Check here if this RAM Submittal covers additional Release Tracking Numbers (RTNs). RTNs that have been previously linked to a Primary Tier Classified RTN do not need to be listed here. This section is intended to allow a RAM to cover more than one unclassified RTN and not show permanent linkage to a Primary Tier Classified RTN.
- b. Provide the additional Release Tracking Number(s) covered by this RAM Submittal. ☐ - ☐ ☐ - ☐

(All sections of this transmittal form must be filled out unless otherwise noted above)



Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC106

RELEASE ABATEMENT MEASURE (RAM)
TRANSMITTAL FORM

Release Tracking Number

3 - 362

Pursuant to 310 CMR 40.0444 - 0446 (Subpart D)

C. RELEASE OR THREAT OF RELEASE CONDITIONS THAT WARRANT RAM:

1. Identify Media Impacted and Receptors Affected: (check all that apply)

- ☒ a. Air ☐ b. Basement ☐ c. Critical Exposure Pathway ☒ d. Groundwater ☐ e. Residence
☐ f. Paved Surface ☐ g. Private Well ☐ h. Public Water Supply ☐ i. School ☐ j. Sediments
☒ k. Soil ☐ l. Storm Drain ☐ m. Surface Water ☐ n. Unknown ☐ o. Wetland ☐ p. Zone 2
☐ q. Others Specify: _____

2. Identify all sources of the Release or Threat of Release, if known: (check all that apply)

- ☐ a. Above-ground Storage Tank (AST) ☐ b. Boat/Vessel ☐ c. Drums ☐ d. Fuel Tank
☐ e. Pipe/Hose/Line ☐ f. Tanker Truck ☐ g. Transformer ☐ h. Under-ground Storage Tank (UST)
☐ i. Vehicle ☒ j. Others Specify: **FORMER MGP OPERATIONS**

3. Identify Oils and Hazardous Materials Released: (check all that apply)

- ☐ a. Oils ☐ b. Chlorinated Solvents ☐ c. Heavy Metals
☒ d. Others Specify: **MGP CONTAMINANTS: VOCs, PAHS, CYANIDE**

D. DESCRIPTION OF RESPONSE ACTIONS: (check all that apply, for volumes list cumulative amounts)

- | | |
|--|---|
| <input type="checkbox"/> 1. Assessment and/or Monitoring Only | <input type="checkbox"/> 2. Temporary Covers or Caps |
| <input type="checkbox"/> 3. Deployment of Absorbent or Containment Materials | <input type="checkbox"/> 4. Temporary Water Supplies |
| <input checked="" type="checkbox"/> 5. Structure Venting System | <input type="checkbox"/> 6. Temporary Evacuation or Relocation of Residents |
| <input type="checkbox"/> 7. Product or NAPL Recovery | <input type="checkbox"/> 8. Fencing and Sign Posting |
| <input type="checkbox"/> 9. Groundwater Treatment Systems | <input type="checkbox"/> 10. Soil Vapor Extraction |
| <input type="checkbox"/> 11. Bioremediation | <input type="checkbox"/> 12. Air Sparging |



Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC106

RELEASE ABATEMENT MEASURE (RAM)
TRANSMITTAL FORM

Release Tracking Number

3 - 362

Pursuant to 310 CMR 40.0444 - 0446 (Subpart D)

D. DESCRIPTION OF RESPONSE ACTIONS (cont.): (check all that apply, for volumes list cumulative amounts)

☐ 13. Excavation of Contaminated Soils

☐ a. Re-use, Recycling or Treatment

☐ i. On Site Estimated volume in cubic yards _____

☐ ii. Off Site Estimated volume in cubic yards _____

ii. Receiving Facility: _____ Town: _____ State: _____

ii. Receiving Facility: _____ Town: _____ State: _____

iii. Describe: _____

☐ b. Store

☐ i. On Site Estimated volume in cubic yards _____

☐ ii. Off Site Estimated volume in cubic yards _____

ii. Receiving Facility: _____ Town: _____ State: _____

ii. Receiving Facility: _____ Town: _____ State: _____

☐ c. Landfill

☐ i. Cover Estimated volume in cubic yards _____

Receiving Facility: _____ Town: _____ State: _____

☐ ii. Disposal Estimated volume in cubic yards _____

Receiving Facility: _____ Town: _____ State: _____

14. Removal of Drums, Tanks or Containers:

a. Describe Quantity and Amount: _____

b. Receiving Facility: _____ Town: _____ State: _____

c. Receiving Facility: _____ Town: _____ State: _____

☒ 15. Removal of Other Contaminated Media:

a. Specify Type and Volume: **TO DATE: 47 55-GALLON DRUMS (APPROXIMATELY 7,755 LBS) OF SPENT ACTIVATED CARBON**

b. Receiving Facility: **CLEAN HARBORS** Town: **BRISTOL** State: **CT**

c. Receiving Facility: **CLEAN HARBORS** Town: **BRAINTREE** State: **MA**

16. Other Response Actions:

Describe: _____

17. Use of Innovative Technologies:

Describe: _____



Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC106

RELEASE ABATEMENT MEASURE (RAM)
TRANSMITTAL FORM

Release Tracking Number

3 - 362

Pursuant to 310 CMR 40.0444 - 0446 (Subpart D)

E. LSP SIGNATURE AND STAMP :

I attest under the pains and penalties of perjury that I have personally examined and am familiar with this transmittal form, including any and all documents accompanying this submittal. In my professional opinion and judgment based upon application of (i) the standard of care in 309 CMR 4.02(1), (ii) the applicable provisions of 309 CMR 4.02(2) and (3), and 309 CMR 4.03(2), and (iii) the provisions of 309 CMR 4.03(3), to the best of my knowledge, information and belief,

> if Section B of this form indicates that a **Release Abatement Measure Plan** is being submitted, the response action(s) that is (are) the subject of this submittal (i) has (have) been developed in accordance with the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000, (ii) is (are) appropriate and reasonable to accomplish the purposes of such response action(s) as set forth in the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000 and (iii) comply(ies) with the identified provisions of all orders, permits, and approvals identified in this submittal;

> if Section B of this form indicates that a **Release Abatement Measure Status Report** and/or **Remedial Monitoring Report** is being submitted, the response action(s) that is (are) the subject of this submittal (i) is (are) being implemented in accordance with the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000, (ii) is (are) appropriate and reasonable to accomplish the purposes of such response action(s) as set forth in the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000 and (iii) comply(ies) with the identified provisions of all orders, permits, and approvals identified in this submittal;

> if Section B of this form indicates that a **Release Abatement Measure Completion Statement** is being submitted, the response action(s) that is (are) the subject of this submittal (i) has (have) been developed and implemented in accordance with the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000, (ii) is (are) appropriate and reasonable to accomplish the purposes of such response action(s) as set forth in the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000 and (iii) comply(ies) with the identified provisions of all orders, permits, and approvals identified in this submittal;

I am aware that significant penalties may result, including, but not limited to, possible fines and imprisonment, if I submit information which I know to be false, inaccurate or materially incomplete.

1. LSP #: 2242

2. First Name: RICHARD P

3. Last Name: STANDISH

4. Telephone: 8602829400

5. Ext.:

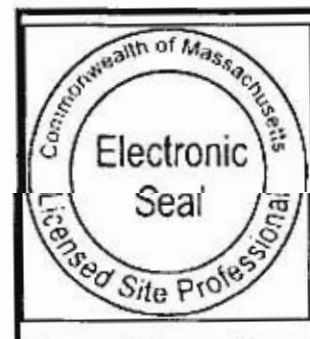
6. FAX:

7. Signature: RICHARD P STANDISH

8. Date: 10/04/2007

(mm/dd/yyyy)

9. LSP Stamp:





Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC106

RELEASE ABATEMENT MEASURE (RAM)
TRANSMITTAL FORM

Release Tracking Number

3 - 362

Pursuant to 310 CMR 40.0444 - 0446 (Subpart D)

F. PERSON UNDERTAKING RAM:

1. Check all that apply: ☐ a. change in contact name ☐ b. change of address ☐ c. change in the person undertaking response actions

2. Name of Organization: **MASS ELECTRIC CO DBA NATIONAL GRID**

3. Contact First Name: **MICHELE** 4. Last Name: **LEONE**

5. Street: **25 RESEARCH DRIVE** 6. Title: **SR ENVMTL ENG**

7. City/Town: **WESTBOROUGH** 8. State: **MA** 9. ZIP Code: **01582-0000**

10. Telephone: **5083894296** 11. Ext.: 12. FAX:

G. RELATIONSHIP TO RELEASE OR THREAT OF RELEASE OF PERSON UNDERTAKING RAM:

☒ 1. RP or PRP ☐ a. Owner ☐ b. Operator ☐ c. Generator ☐ d. Transporter

☒ e. Other RP or PRP Specify: **OTHER PRPS**

☐ 2. Fiduciary, Secured Lender or Municipality with Exempt Status (as defined by M.G.L. c. 21E, s. 2)

☐ 3. Agency or Public Utility on a Right of Way (as defined by M.G.L. c. 21E, s. 5(j))

☐ 4. Any Other Person Undertaking RAM Specify Relationship:

H. REQUIRED ATTACHMENT AND SUBMITTALS:

☐ 1. Check here if any Remediation Waste, generated as a result of this RAM, will be stored, treated, managed, recycled or reused at the site following submission of the RAM Completion Statement. You must submit a Phase IV Remedy Implementation Plan along with the appropriate transmittal form (BWSC108).

☒ 2. Check here if the Response Action(s) on which this opinion is based, if any, are (were) subject to any order(s), permit(s) and/or approval(s) issued by DEP or EPA. If the box is checked, you MUST attach a statement identifying the applicable provisions thereof.

☒ 3. Check here to certify that the Chief Municipal Officer and the Local Board of Health have been notified of the implementation of a Release Abatement Measure.

☒ 4. Check here if any non-updatable information provided on this form is incorrect, e.g. Release Address/Location Aid. Send corrections to the DEP Regional Office.

☐ 5. If a RAM Compliance Fee is required for this RAM, check here to certify that a RAM Compliance Fee was submitted to DEP, P. O. Box 4062, Boston, MA 02211.

☒ 6. Check here to certify that the LSP Opinion containing the material facts, data, and other information is attached.



Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC106

RELEASE ABATEMENT MEASURE (RAM)
TRANSMITTAL FORM

Release Tracking Number

3 - 362

Pursuant to 310 CMR 40.0444 - 0446 (Subpart D)

I. CERTIFICATION OF PERSON UNDERTAKING RAM:

I, **MICHELE LEONE**, attest under the pains and penalties of perjury (i) that I have personally examined and am familiar with the information contained in this submittal, including any and all documents accompanying this transmittal form, (ii) that, based on my inquiry of those individuals immediately responsible for obtaining the information, the material information contained in this submittal is, to the best of my knowledge and belief, true, accurate and complete, and (iii) that I am fully authorized to make this attestation on behalf of the entity legally responsible for this submittal. I/the person or entity on whose behalf this submittal is made am/is aware that there are significant penalties, including, but not limited to, possible fines and imprisonment, for willfully submitting false, inaccurate, or incomplete information.

2. By: **MICHELE LEONE**

Signature

3. Title: **SR ENVMTL ENG**

4. For: **MASS ELECTRIC CO DBA NATIONAL GRID**

(Name of person or entity recorded in Section F)

5. Date: **10/04/2007**

(mm/dd/yyyy)

☐ 6. Check here if the address of the person providing certification is different from address recorded in Section F.

7. Street: _____

8. City/Town: _____ 9. State: _____ 10. ZIP Code: _____

11. Telephone: _____ 12. Ext.: _____ 13. FAX: _____

YOU ARE SUBJECT TO AN ANNUAL COMPLIANCE ASSURANCE FEE OF UP TO \$10,000 PER BILLABLE YEAR FOR THIS DISPOSAL SITE. YOU MUST LEGIBLY COMPLETE ALL RELEVANT SECTIONS OF THIS FORM OR DEP MAY RETURN THE DOCUMENT AS INCOMPLETE. IF YOU SUBMIT AN INCOMPLETE FORM, YOU MAY BE PENALIZED FOR MISSING A REQUIRED DEADLINE.

Date Stamp (DEP USE ONLY:)

Received by DEP on

10/4/2007 5:06:29 PM



Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC106A

RAM REMEDIAL MONITORING REPORT

Pursuant to 310 CMR 40.0400 (SUBPART D)

Release Tracking Number

3 - 362

Remedial System or Monitoring Program: 1 of 1

A. DESCRIPTION OF ACTIVE REMEDIAL SYSTEM OR ACTIVE REMEDIAL MONITORING PROGRAM:

1. Type of Active Remedial System or Active Remedial Monitoring Program: (check all that apply)

☒ a. Active Remedial System: (check all that apply)

☐ i. NAPL Recovery

☐ ii. Soil Vapor Extraction/Bioventing

☐ iii. Vapor-phase Carbon Adsorption

☐ iv. Groundwater Recovery

☐ v. Dual/Multi-phase Extraction

☐ vi. Aqueous-phase Carbon Adsorption

☐ vii. Air Stripping

☐ viii. Sparging/Biosparging

☐ ix. Cat/Thermal Oxidation

☒ x. Other Describe: **SUB-SLAB VENTILATION/DEPRESSURIZATION SYSTEM**

☐ b. Application of Remedial Additives: (check all that apply)

☐ i. To the Subsurface

☐ ii. To Groundwater (Injection)

☐ iii. To the Surface

☐ c. Active Remedial Monitoring Program Without the Application of Remedial Additives: (check all that apply; Sections C, D and E are not required; attach supporting information, data, maps and/or sketches needed by checking Section F5)

☐ i. Reactive Wall

☐ ii. Natural Attenuation

☐ iii. Other Describe: _____

2. Mode of Operation: (check one)

☒ a. Continuous

☐ b. Intermittent

☐ c. Pulsed

☐ d. One-time Event Only

☐ e. Other: _____

3. System Effluent/Discharge: (check all that apply)

☐ a. Sanitary Sewer/POTW

☐ b. Groundwater Re-infiltration/Re-injection: (check one)

☐ i. Downgradient

☐ ii. Upgradient

☒ c. Vapor-phase Discharge to Ambient Air: (check one)

☒ i. Off-gas Controls

☐ ii. No Off-gas Controls

☐ d. Drinking Water Supply

☐ e. Surface Water (including Storm Drains)

☐ f. Other Describe: _____

B. MONITORING FREQUENCY:

1. Reporting period that is the subject of this submittal:

From: 3/22/2007

To: 9/10/2007

(mm/dd/yyyy)

(mm/dd/yyyy)

2. Number of monitoring events during the reporting period: (check one)

☐ a. System Startup: (if applicable)

☐ i. Days 1, 3, 6, and then weekly thereafter, for the first month.

☐ ii. Other Describe: _____

☒ b. Post-system Startup (after first month) or Monitoring Program:

☒ i. Monthly

☐ ii. Quarterly

☐ iii. Other Describe: _____

☒ 3. Check here to certify that the number of required monitoring events were conducted during the reporting period.

C. EFFLUENT/DISCHARGE REGULATION: (check one to indicate how the effluent/discharge limits were established)

☐ 1. NPDES: (check one)

☐ a. Remediation General Permit

☐ b. Individual Permit

☐ c. Emergency Exclusion

Effective Date of Permit:

(mm/dd/yyyy)

2. MCP Performance Standard MCP Citations(s): _____

☒ 3. DEP Approval Letter Date of Letter: 6/9/1999

(mm/dd/yyyy)

4. Other Describe: _____



Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC106A

RAM REMEDIAL MONITORING REPORT

Pursuant to 310 CMR 40.0400 (SUBPART D)

Release Tracking Number

3 - 362

Remedial System or Monitoring Program: 1 of 1

D. WASTEWATER TREATMENT PLANT OPERATOR: (check one)

1. Required due to Remedial Wastewater Treatment Plant in place for more than 30 days.

a. Name: _____ b. Grade: _____

c. License No.: _____ d. License Exp. Date: _____ (mm/dd/yyyy)

2. Not Required

☒ 3. Not Applicable

E. STATUS OF ACTIVE REMEDIAL SYSTEM OR ACTIVE REMEDIAL MONITORING PROGRAM DURING REPORTING PERIOD:

(check all that apply)

☒ 1. The Active Remedial System was functional one or more days during the Reporting Period.

a. Days System was Fully Functional: 162 b. GW Recovered (gals): _____

c. NAPL Recovered (gals): _____ d. GW Discharged (gals): _____

e. Avg. Soil Gas Recovery Rate (scfm): 37.50 f. Avg. Sparging Rate (scfm): _____

2. Remedial Additives: (check all that apply)

a. No Remedial Additives applied during the Reporting Period.

b. Enhanced Bioremediation Additives applied: (total quantity applied at the site for the current reporting period)

i. Nitrogen/Phosphorus:

Name of Additive	Date	Quantity	Units

ii. Peroxides:

Name of Additive	Date	Quantity	Units

iii. Microorganisms:

Name of Additive	Date	Quantity	Units

iv. Other:

Name of Additive	Date	Quantity	Units

c. Chemical oxidation/reduction additives applied: (total quantity applied at the site for the current reporting period)

i. Permanganates:

Name of Additive	Date	Quantity	Units

ii. Peroxides:

Name of Additive	Date	Quantity	Units

iii. Persulfates:

Name of Additive	Date	Quantity	Units

iv. Other:

Name of Additive	Date	Quantity	Units



Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

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RAM REMEDIAL MONITORING REPORT

Pursuant to 310 CMR 40.0400 (SUBPART D)

Release Tracking Number

3 - 362

Remedial System or Monitoring Program: 1 of 1

E. STATUS OF ACTIVE REMEDIAL SYSTEM OR ACTIVE REMEDIAL MONITORING PROGRAM DURING REPORTING PERIOD: (cont.)
(check all that apply)

d. Other additives applied: (total quantity applied at the site for the current reporting period)

Name of Additive	Date	Quantity	Units

Name of Additive	Date	Quantity	Units

e. Check here if any additional Remedial Additives were applied. Attach list of additional additives and include Name of Additive, Date Applied, Quantity Applied and Units (in gals. or lbs.)

F. SHUTDOWNS OF ACTIVE REMEDIAL SYSTEM OR ACTIVE REMEDIAL MONITORING PROGRAM: (check all that apply)

☒ 1. The Active Remedial System had unscheduled shutdowns on one or more occasions during the Reporting Period.

a. Number of Unscheduled Shutdowns: 12 b. Total Number of Days of Unscheduled Shutdowns: 10

c. Reason(s) for Unscheduled Shutdowns: SYSTEM OVERHEATING DUE TO MOTOR PROBLEMS

☒ 2. The Active Remedial System had scheduled shutdowns on one or more occasions during the Reporting Period.

a. Number of Scheduled Shutdowns: 1 b. Total Number of Days of Scheduled Shutdowns: 0

c. Reason(s) for Scheduled Shutdowns: ELECTRICAL MAINTANANCE

☐ 3. The Active Remedial System or Active Remedial Monitoring Program was permanently shutdown/discontinued during the Reporting Period.

a. Date of Final System or Monitoring Program Shutdown: (mm/dd/yyyy)

☐ b. No Further Effluent Discharges.

☐ c. No Further Application of Remedial Additives planned; sufficient monitoring completed to demonstrate compliance with 310 CMR 40.0046.

☐ d. No Further Submittals Planned.

☐ e. Other: Describe:

G. SUMMARY STATEMENTS: (check all that apply for the current reporting period)

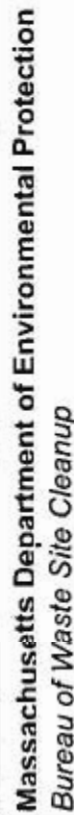
☒ 1. All Active Remedial System checks and effluent analyses required by the approved plan and/or permit were performed when applicable.

☒ 2. There were no significant problems or prolonged (>25% of reporting period) unscheduled shutdowns of the Active Remedial System.

☒ 3. The Active Remedial System or Active Remedial Monitoring Program operated in conformance with the MCP, and all applicable approval conditions and/or permits.

4. Indicate any Operational Problems or Notes:

☒ 5. Check here if additional/supporting information, data, maps, and/or sketches are attached to the form.



BWS C106 B

Release Tracking Number

$$\begin{array}{r} 3 \\ - 362 \\ \hline \end{array}$$

RAM REMEDIAL MONITORING REPORT EFFLUENT/DISCHARGE CONCENTRATIONS

Pursuant to 310 CMR 40.0400 (SUBPART D)

Remedial System or Monitoring Program: 1 of: 1

For each Point of Measurement, indicate the highest concentration detected during the reporting period, of each oil, hazardous material and/or remedial additive.

[illegible]

Check here if an additional BWSC106B, Effluent/Discharge Concentrations Form, is needed.

Attachment H

Section H - LSP Opinion

Release Abatement Measure (RAM) Status Report No. 19
Former Manufactured Gas Plant (MGP) Site
Parcel B, 129 Commercial Street
Malden, Massachusetts
RTN 3-0362 and Linked RTN 3-3757
Tier 1B Permit 7378

SECTION H(2): Orders, Permits, or Approvals on which the Response Actions are based

The Response Action(s) on which this opinion is based is subject to the following approvals:

- Written approval of the associated RAM Plan was issued by DEP on 24 September 1998.
- Written conditional approval of the 9 April 1999 RAM Plan modification was issued by DEP on 9 June 1999.
- An Amendment of Conditional Approval was issued by DEP on 27 July 1999.