



Global Operations, Environment, Health & Safety

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November 17, 2017

Mr. Richard Fisher (OSRR07-1)
U.S. Environmental Protection Agency
EPA New England (MC HBO)
5 Post Office Square – Suite 100
Boston, MA 02109-3912

**Re: GE-Pittsfield/Housatonic River Site
Groundwater Management Area 3 (GECD330)
Indoor Air Investigation and Assessment Summary Report
for Building 59– Summer 2017**

Dear Mr. Fisher:

Attached is the General Electric Company's (GE's) *Indoor Air Investigation and Assessment Summary Report for Building 59 – Winter 2017* for Groundwater Management Area (GMA) 3 (also known as the Plant Site 2 GMA). This report presents the results of the September 2017 indoor air and sub-slab soil gas sampling event at Building 59, and also includes a revised evaluation of all available indoor air data and details describing the mitigation activities for Building 59.

Please feel free to contact me with any questions or comments.

Sincerely yours,

Matthew Calacone
Senior Project Manager – Environmental Remediation

Enclosure



SEMS Doc ID 623281

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General Electric Company
Pittsfield, Massachusetts

INDOOR AIR INVESTIGATION AND ASSESSMENT SUMMARY REPORT FOR BUILDING 59 – SUMMER 2017

November 2017

A large, solid orange geometric shape, resembling a stylized triangle or a section of a larger triangle, is positioned in the bottom right corner of the page. It is composed of two overlapping triangular areas, creating a complex, angular form that extends from the bottom edge towards the top right corner.

INDOOR AIR INVESTIGATION AND ASSESSMENT SUMMARY REPORT FOR BUILDING 59 –
SUMMER 2017

**INDOOR AIR
INVESTIGATION AND
ASSESSMENT
SUMMARY REPORT
FOR BUILDING 59 –
SUMMER 2017**

Prepared for:
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1 INTRODUCTION

1.1 General

This *Indoor Air Investigation and Assessment Summary Report for Building 59 – Summer 2017* (Summer 2017 Indoor Air Report) summarizes the activities performed by GE in September 2017 to monitor the presence of volatile constituents in indoor air and sub-slab soil gas in Building 59 at the General Electric Company's (GE's) Pittsfield, Massachusetts facility. This report also includes a compilation of all relevant indoor air and sub-slab soil gas monitoring results for Building 59 since 2006; and based on that collective data set as well as the September 2017 data, it provides a revised evaluation, using screening and action levels issued by the U.S. Environmental Protection Agency (EPA), of potential current and future indoor air-related risks to building occupants as a result of volatilization from the light non-aqueous-phase liquid (LNAPL) located in the groundwater in this area.¹ As noted in this report, due to previously elevated levels of trichloroethene (TCE) in one location in Building 59 (compared to EPA's action levels), GE installed a mitigation system in that building in February 2016, and thus the results from the September 2017 monitoring event reflect the continued effects of that mitigation system. As discussed in this report, those results demonstrate that the mitigation system continues to reduce TCE concentrations below the elevated TCE concentrations historically reported at that location.

1.2 Project Background

In 2006, GE conducted sampling of groundwater, LNAPL, sub-slab soil gas, and indoor air near and within GE-owned Buildings 51 and 59, located in Groundwater Management Area (GMA) 3 under the Consent Decree (CD) for the GE-Pittsfield/Housatonic River Site. In addition, GE conducted an inspection at Buildings 51 and 59 to identify potential pathways through which soil gas beneath the buildings might enter the buildings (e.g., via slabs or sidewalls). In March 2007, GE proposed, at EPA's direction, to perform future monitoring of soil gas beneath, and indoor air within, those buildings, as well as to conduct an inventory to identify commercial products within those buildings that may contain chemicals similar to those detected in soil gas and indoor air samples. That proposal was conditionally approved by EPA in June 2007.

Since 2007, GE has conducted annual building inventories and soil gas and indoor air sampling events in October 2008, October 2009, November 2010, October 2011, October 2012, January 2013, March 2014, March 2015 (Building 59 only), March 2016, August 2016 (Building 59 only), March 2017 (Building 59 only), and September 2017 (Building 59 only). The historical and current sub-slab soil gas and indoor air sampling locations are shown on Figure 1. Prior to the March 2015 monitoring event, GE summarized the results of these activities in soil gas and indoor air investigation reports that were submitted to EPA as appendices to the periodic GMA 3 groundwater quality and NAPL monitoring interim reports.

¹ GE has conducted this evaluation at EPA's direction. GE believes, and preserves its position, that the indoor air concentrations in buildings that are occupied solely by workers (which is the case for Building 59) should be compared to the workplace exposure standards established by the U.S. Occupational Safety and Health Administration (OSHA), the guidelines established by the National Institute for Occupational Safety and Health (NIOSH), and the threshold limit values (TLVs) issued by the American Conference of Governmental Industrial Hygienists (ACGIH) for worker protection.

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In a conditional approval letter dated September 12, 2013, EPA directed GE to provide an evaluation of potential vapor intrusion risks from constituents present in groundwater and LNAPL, using all available indoor air and sub-slab soil gas sampling results from Buildings 51 and 59. EPA also specified the approach that GE should use in these evaluations, including the use of EPA's Vapor Intrusion Screening Levels (VISLs) as screening values in those evaluations.

GE conducted the next round of indoor air and sub-slab soil gas sampling in March 2014. The results of that sampling event, together with the overall evaluations required by EPA's September 12, 2013 letter, were presented in a *Sub-Slab Soil Gas and Indoor Air Investigation Summary Report for Buildings 51 and 59 – Winter 2014* (Winter 2014 Indoor Air Report), which was submitted as Appendix F to GE's Spring 2014 GMA 3 Groundwater/NAPL Monitoring Report. The evaluations included screening calculations and an assessment of potential vapor intrusion risks from both groundwater and NAPL to the occupants of Buildings 51 and 59, based on all indoor air and sub-slab soil gas sampling data collected since 2006, using EPA's VISLs and procedures consistent with those specified in EPA's September 12, 2013 conditional approval letter.

EPA provided conditional approval of the Winter 2014 Indoor Air Report in a letter dated March 12, 2015. In that letter, EPA directed GE to provide future soil gas and indoor air assessment reports separately from the GMA 3 groundwater and NAPL monitoring reports. In addition, EPA's letter contained risk calculations indicating the presence of a risk above EPA benchmarks due to the concentrations of TCE at one location within Building 59; and it directed GE to modify the frequency of indoor air sampling at Building 59 to semi-annual (in winter and summer) for at least a two-year period. Further, EPA's letter directed GE to provide revised risk calculations for each monitored location within each building, as well as each building as a whole, for constituents that were not screened out. It also required that, for the Building 59 location identified by EPA and any other location showing a risk above EPA standards, GE must propose corrective actions. Finally, EPA approved GE's proposal to limit the constituents to be analyzed for in future sampling events to only those constituents that were detected in indoor air in at least one event at a concentration at or above 50% of the VISLs; and it accepted GE's proposal to reduce the monitoring frequency for Building 51 to once every other year, beginning in winter 2016.

In accordance with that letter, GE conducted a round of indoor air and sub-slab soil gas sampling in Building 59 on March 2015, and it reported the results in an *Indoor Air Investigation and Assessment Summary Report for Buildings 51 and 59 – Winter 2015* (Winter 2015 Indoor Air Report), submitted to EPA on June 12, 2015. That report also provided the revised risk calculations required by EPA's March 12, 2015 letter. The risk calculations used the cumulative TCE dataset presented in Table 1, and the results of these risk calculations are presented in Table 2. As shown in Table 2, the estimated excess cancer risks at each location and for the building as a whole were well below a risk level of 1×10^{-5} . For non-cancer hazards, the hazard index (HI) was below 1 for locations 59-IA-1 and 59-IA-3 and for the building as a whole, but was 2 for location 59-IA-2, which is above EPA's benchmark HI of 1. GE also compared the reported TCE concentrations at each location and building-wide with the EPA Region 9 "accelerated response action level" of $8 \mu\text{g}/\text{m}^3$ and "urgent response action level" of $24 \mu\text{g}/\text{m}^3$ for 8-hour commercial/industrial exposure. The TCE concentrations at locations 59-IA-1 and 59-IA-3 were below the $8 \mu\text{g}/\text{m}^3$ action level. However, several concentrations detected at location 59-IA-2, as well as the average concentration at that location, were above that action level; and the average building-wide concentration was slightly above that level due to the concentrations at location 59-IA-2. Further, while the average TCE concentration at location 59-IA-2 was below the "urgent response action level" of $24 \mu\text{g}/\text{m}^3$, a few

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individual results from that location, including the results from March 2014 and March 2015 (31 and 26 $\mu\text{g}/\text{m}^3$, respectively), exceeded that level. Given the continued elevated concentrations of TCE at one location in Building 59, GE proposed mitigation activities to address those levels, including the installation of a sub-slab depressurization system (SSDS) in Building 59 in the vicinity of that location. EPA provided conditional approval of that report by letter dated September 10, 2015.

Following receipt of that letter, GE commenced implementation of the mitigation activities in Building 59, including the design and installation of the SSDS in the area around the location that had showed elevated concentrations of TCE. GE completed installation of that system and began operation of it in February 2016, with subsequent modifications through April 2016. Given these activities, the next indoor air sampling event in Building 59 was deferred, with EPA concurrence, until after that system was in operation.

On March 15 and 16, 2016, GE conducted the winter 2016 sampling event for Buildings 51 and 59. This constituted the first sampling event in Building 59 since installation of the SSDS, as well as the regularly scheduled biennial sampling event for Building 51. As part of this event, GE conducted a building materials/products inventory, along with indoor air and sub-slab soil gas sampling, at both buildings. The results were presented in the *Indoor Air Investigation and Assessment Summary Report for Buildings 51 and 59 – Winter 2016* (Winter 2016 Indoor Air Report), submitted to EPA on June 3, 2016. EPA provided conditional approval of that report in a letter dated August 1, 2016.

On August 24, 2016, GE conducted the summer 2016 sampling event for Building 59. This constituted the second sampling event in Building 59 since installation of the SSDS. As part of this event, GE conducted a building materials/products inventory, along with indoor air and sub-slab soil gas sampling, at Building 59, only. The results were presented in the *Indoor Air Investigation and Assessment Summary Report for Building 59 – Summer 2016* (Summer 2016 Indoor Air Report), submitted to EPA on November 11, 2016. EPA provided conditional approval of that report in a letter dated February 1, 2016².

On March 17, 2017, GE conducted the winter 2017 sampling event for Building 59. This constituted the third sampling event in Building 59 since installation of the SSDS. As part of this event, GE conducted a building materials/products inventory, along with indoor air and sub-slab soil gas sampling, at Building 59, only. The results were presented in the *Indoor Air Investigation and Assessment Summary Report for Building 59 – Winter 2017* (Winter 2017 Indoor Air Report), submitted to EPA on June 2, 2017. EPA provided a draft conditional approval letter of that report to GE dated October 3, 2017.

On September 1, 2017, GE conducted the summer 2017 sampling event for Building 59. This constituted the fourth sampling event in Building 59 since installation of the SSDS. As part of this event, GE conducted a building materials/products inventory, along with indoor air and sub-slab soil gas sampling, at Building 59, only. The results are presented in this report.

² As the letter provides approval of the report submitted on November 11, 2016, it is noted that the date listed on the final the conditional approval letter is a typographical error and should be February 1, 2017.

1.3 Format of Report

The remainder of this report is organized as follows:

- Section 2 summarizes the September 2017 materials/products inventory and soil gas/indoor air sampling and analysis activities conducted at Building 59.
- Section 3 notes there is no update to the screening assessment of potential vapor intrusion from groundwater that was contained in the Winter 2014 Indoor Air Report (which showed no unacceptable vapor intrusion risk from constituents in groundwater), considering no groundwater data has been collected for monitoring wells around Building 51/59 since 2016.
- Section 4 provides an update of the previously presented screening-level assessments of potential vapor intrusion from LNAPL to the indoor air at Building 59, taking into account the September 2017 indoor air sampling results from that building.
- Section 5 presents an updated evaluation of potential vapor intrusion risks to occupants of Building 59 for the constituents that were retained after the screening assessment. In accordance with EPA's March 12, 2015 conditional approval letter, this evaluation considers each monitored location in Building 59, as well as the building as a whole. In accordance with EPA's February 1, 2016 conditional approval letter, this evaluation focuses on the data collected since the installation of the SSDS in February 2016 and the current (September 2017) indoor air sampling results.
- Section 6 describes the monitoring activities conducted for the SSDS in Building 59 since the Winter 2017 Indoor Air Report.
- Section 7 provides an outline of the general schedule for future activities.

Supporting information is provided in tables, figures, and attachments to this report.

2 SUMMARY OF SEPTEMBER 2017 INVESTIGATIONS

In September 2017, GE conducted a building materials and products inventory, sub-slab soil gas sampling, and indoor air sampling in Building 59. Sampling and analytical methods used were consistent with those used during prior monitoring events (with minor modifications noted below). The September 2017 investigation activities and results are described below.

2.1 Building Materials and Products Inventory

On August 31, 2017, a reconnaissance was performed at Building 59 to identify and inventory materials and/or products that may contain chemicals representing a potential source of volatile constituents in indoor air. The reconnaissance/inventory was performed in accessible areas in and around the designated sampling areas, and did not specifically focus on the building structure itself or on furnishings (e.g., carpet, adhesives, etc.). Rather, the activities focused on those materials and products used or stored inside the buildings, such as lubricants, fuels, chemicals, cleaning supplies, etc. Attachment A Table A-1 summarizes the results of the inventory conducted at Building 59, along with the volatile constituents associated with each item. In September 2017, no TCE-containing products were identified or noted to have recently been removed from Building 59 prior to the inventory.

2.2 Sub-Slab Soil Gas and Indoor Air Sampling and Analysis Activities

Sub-slab soil gas and indoor air samples were collected and analyzed in general accordance with the procedures specified in GE's July 2013 Field Sampling Plan/Quality Assurance Project Plan (FSP/QAPP). The Building 59 sampling locations are shown on Figure 2, as well as in the photographic log provided in Attachment B. The sample locations for soil gas and indoor air were co-located to assess potential correlations, if any, between soil gas and indoor air quality. The laboratory provided individual certified clean canisters for sample collection. Field pressure checks prior to sample collection confirmed that canisters were set with an initial volume of greater than 27 inches of mercury (Hg). Flow regulators were pre-set by the laboratory to provide uniform sample collection over the approximate 8-hour sampling period.

Samples were collected from each of the permanent sub-slab soil gas points (SS) in Building 59 on Friday September 1, 2017. Each sample point and sample collection apparatus was purged of three air volumes (calculated based on sampling train length) into a Tedlar bag. In addition, the seals around each point were evaluated by performing a tracer gas leak test as described in the FSP/QAPP. Following completion of a successful tracer gas leak test, samples were collected from the sub-slab locations for an approximate 8-hour period using a 6-liter SUMMA® canister with an attached pre-set flow regulator.

Paired with the sub-slab samples, indoor air (IA) samplers were placed between 4 and 5 feet above the finished floor and set to concurrently collect air samples over an approximate 8-hour period (to coincide with normal working hours and the collection of the sub-slab gas samples) using a pre-set flow regulator and 6-liter SUMMA® canister. A duplicate sample was collected at location 59-IA-3 with an individual regulator to allow for a uniform sample collection over the same sampling period. The sub-slab soil gas and indoor air sampling logs are included in Attachment C. With the exception of the duplicate indoor air sample collected at location 59-IA-3, all paired sample locations were collected generally over the same period of time (within 45-

minutes of each other) with all samples being collected for no less than 8 hours. Due to an equipment error, the sample collection of for the duplicate indoor air sample collected at location 59-IA-3 had begun collection approximately 1.5 hours after the parent sample had initiated collection, and the total sample duration for the duplicate was approximately 7 hours and 6 minutes. As noted in the analytical tables, this difference in collection time did not appear to affect the result as the detections between the parent and duplicate sample were generally within the same order of magnitude.

All indoor air and sub-slab soil gas samples were submitted for laboratory analysis in accordance with EPA Compendium Method TO-15, titled Compendium of Methods for the Determination of Toxic Organics Compounds in Ambient Air – Determination of Volatile Organic Compounds (VOCs) in Air Collected in Specially-Prepared Canisters and Analyzed by Gas Chromatography/Mass Spectrometry (GC/MS). The samples were submitted to Eurofins Air Toxics Ltd. laboratory in Folsom, California, which has current National Environmental Laboratory Accreditation Program (NELAP) certification and is accredited in the Commonwealth of Massachusetts for conducting analyses in accordance with EPA Compendium Method TO-15. In years prior to 2015, the constituents for which analyses were performed included volatile organic compounds (VOCs) and certain semi-volatile organic compounds (SVOCs) that can be identified during the same analysis. However, since the March 2015 event, as approved by EPA through its conditional approval of the Winter 2014 Indoor Air Report, the constituents analyzed for include only those constituents that have been detected in indoor air in at least one event at a concentration at or above 50% of the VISLs.

2.3 Sub-Slab Soil Gas and Indoor Air Analytical Results

The validated analytical results for the indoor samples collected from Building 59 in September 2017 are presented in Table 3, and the validated analytical results for the sub-slab soil gas samples collected from Building 59 in September 2017 are presented in Table 4.³ As indicated in those tables, 13 constituents were detected in at least one sub-slab soil gas sample, and 12 constituents were detected in at least one indoor air sample, with only one constituent (TCE) showing an exceedance of the applicable indoor air VISL at one or more locations.

As in prior sampling events, all indoor air concentrations are far below the limits applicable to occupational settings such as Building 59 – i.e., the OSHA workplace exposure standards, the NIOSH guidelines, and the ACGIH threshold limit values (TLVs). A comparison of the September 2017 indoor air results to those standards and guidelines is provided in Attachment D.⁴

³ As discussed in Section 2.4, the data validation process resulted in the change of one constituent from detected to non-detect. Tables 3 and 4 present the validated results. In addition, for purposes of the vapor intrusion evaluations discussed in subsequent sections of this report, Table 3 also lists EPA's most recent indoor air VISLs for the detected constituents in commercial buildings, using, for each constituent, the lower of the VISL based on a target cancer risk of 1×10^{-6} or the VISL based on a target non-cancer hazard quotient (HQ) of 0.1

⁴ In the tables in Attachment D, the concentrations are presented in parts per million (ppm) by volume (rather than micrograms per cubic meter [$\mu\text{g}/\text{m}^3$]), since the OSHA standards, NIOSH guidelines, and ACGIH TLVs are expressed in units of ppm.

2.4 Data Validation

The September 2017 soil gas and indoor air data were validated in accordance with the procedures outlined in the FSP/QAPP. The results are presented in the Data Validation Report provided in Attachment E. That report indicates that a number of the sample results, including initially reported detections of naphthalene were changed to non-detect due to the presence of the contaminant in the laboratory blank. The remainder of the analytical data are considered acceptable, and all of the data are considered usable.

3 SCREENING ASSESSMENT OF POTENTIAL VAPOR INTRUSION FROM GROUNDWATER

The Winter 2014 Indoor Air Report presented, in Section 3, an evaluation of the potential for constituents in groundwater to pose a vapor intrusion risk to the occupants of Buildings 51 and 59. This evaluation was conducted in accordance with the procedures specified in EPA's September 12, 2013 conditional approval letter. It was based on comparison of the groundwater data collected from the GMA 3 monitoring wells that are located within 100 feet of Building 51 or Building 59 or the historical extent of LNAPL in that area and that have dissolved-phase groundwater data – i.e., wells GMA3-4, GMA3-6, GMA3-7, GMA3-10, 51-8, 51-14, and UB-PZ-3 (as shown on Figure F-4 of the Winter 2014 Indoor Air Report) – to the applicable Method 1 GW-2 groundwater standards set forth in the Massachusetts Contingency Plan (MCP). That evaluation indicated that constituents in groundwater do not pose an unacceptable vapor intrusion risk to the occupants of Buildings 51 and 59, and it was approved by EPA through its March 12, 2015 conditional approval letter. No new groundwater data for the applicable monitoring wells have been collected since Spring 2016 and therefore no additional assessment can be provided since the last assessment was made in the *Indoor Air Investigation and Assessment Report for Building 59-Summer 2016*.

4 UPDATED SCREENING ASSESSMENT OF POTENTIAL VAPOR INTRUSION FROM LNAPL TO BUILDING 59

EPA's September 12, 2013 conditional approval letter set forth a step-wise evaluation approach to evaluate the potential for constituents in the LNAPL near Buildings 51 and 59 to pose a vapor intrusion risk to the occupants of those buildings. This approach involves: (1) an initial screening step that compares the indoor air data dating back to 2006 to EPA's highly conservative indoor air VISLs for a commercial scenario based on a target cancer risk of 1×10^{-6} or a target non-cancer hazard quotient (HQ) of 0.1; (2) a secondary screening assessment using a weight-of-evidence approach to evaluate whether constituents detected in indoor air at levels greater than the applicable VISLs are potentially due to volatilization from the LNAPL; and (3) for constituents that are retained following the secondary screening, a more detailed assessment of potential human health risks to current and future building occupants.

Beginning with the Winter 2014 Indoor Air Report, GE has conducted these analyses for the cumulative indoor air and sub-slab soil gas data collected since 2006. As described in that report, Step 2 in this approach, the weight-of-evidence evaluation, considers the following lines of evidence:

- Detection or absence of the constituent in the LNAPL in this portion of GMA 3;
- An assessment of any indication from the dissolved-phase groundwater data in the vicinity as to whether the indoor air constituent may have been a component of the NAPL;
- Frequency of detection of the constituent in the indoor air of the building;
- Frequency of exceedance of the VISL(s);
- Comparison of the average indoor air concentration of the constituent to the most conservative VISL;
- Comparison of the indoor air concentrations of the constituent to the range of typical background levels of that constituent in indoor air, based on EPA documents and other sources;⁵
- Use or presence of the constituent in products or materials within the building; and
- Comparison of indoor air concentrations to sub-slab soil gas levels, using an attenuation factor (AF) representing the ratio of indoor air to sub-slab soil gas concentrations. According to EPA's Attenuation Factor Database, issued in 2012, an AF less than 0.03 indicates that concentrations

⁵ Typical background indoor air levels of the constituents identified in Building 59, consisting of 50th percentiles or means, 90th percentiles, and 95th percentiles, were identified in Table F-10 of the Winter 2014 Indoor Air Report. These levels were obtained from the following sources: (a) *Background Indoor Air Concentrations of Volatile Organic Compounds in North American Residences (1990 – 2005): A Compilation of Statistics for Assessing Vapor Intrusion* (USEPA 2011), Table ES-1; (b) *Building Assessment and Survey Evaluation Study (BASE)* (USEPA 2001), as reported in Table C2 of the New York State Department of Health (NYSDOH) *Guidance for Evaluating Soil Vapor Intrusion in the State of New York* (NYSDOH 2006); (c) *Study of Volatile Organic Compounds in Air of Fuel Oil Heated Homes* (NYSDOH 2003), as reported in Table C1 in NYSDOH (2006); and (d) Hodgson and Levin (2003), *Volatile Organic Compounds in Indoor Air: A Review of Concentrations Measured in North America Since 1990*, Tables 5 and 6. For additional information, see Table F-10 of the Winter 2014 Indoor Air Report.

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below the slab are much higher than indoor air and more consistent with a migration pathway involving soil gas movement into indoor air.

The weight-of-evidence approach does not rely on any one or even two of these factors alone as a basis for eliminating a chemical from further consideration. Rather, all of the lines of evidence were considered to reach a conclusion as to whether the chemical is attributable to volatilization from the LNAPL.

The remainder of this section provides an update of the prior screening evaluations (i.e., steps 1 and 2 described above) for Building 59 taking into account the sampling data collected in September 2017. An updated risk evaluation of the retained constituents (step 3) is described in Section 5.

For Building 59, cumulative summaries of all historical data are presented in Table 5 (for sub-slab soil gas data) and Table 6 (for indoor air data). The latter table highlights all constituents that have been previously detected in indoor air at Building 59 at levels above EPA's current (June 2017) indoor air VISLs for a commercial scenario, using, for each constituent, the lower of the VISL based on a target cancer risk of 1×10^{-6} or a target non-cancer HQ of 0.1. In addition, Attachment F presents bar charts for all constituents that have ever been detected in the indoor air of Building 59 at a concentration greater than 50% of the applicable VISL during any monitoring event.

The screening evaluation of the data for Building 59 was initially presented in the Winter 2014 Indoor Air Report, updated in the Winter 2015, Winter 2016, Summer 2016, and Winter 2017 Indoor Air Reports, and approved by EPA through its March 12, 2015, September 10, 2015, August 1, 2016, February 1, 2016, and October 3, 2017 conditional approval letters. The previous screening evaluations identified 14 constituents that had been detected in one or more individual sampling events at concentrations above the VISLs. A weight-of-evidence evaluation was then conducted for those 14 constituents based on the lines of evidence described above. That evaluation screened out all constituents except TCE, which was retained for more detailed risk evaluation.

The September 2017 sampling event did not result in the detection of any new constituents above the applicable VISLs. As discussed in Section 2.3 and shown in Table 3, the only constituent detected above its respective VISL in the September 2017 sampling event in Building 59 was TCE. Thus, there is no need for a weight-of-evidence evaluation for any additional constituents. In addition, the September 2017 data do not change the prior weight-of-evidence evaluation for the subject constituents, as updated in the Winter 2015, Winter 2016, Summer 2016, and Winter 2017 Indoor Air Reports, for the following reasons:

- Of the 14 constituents subject to evaluation, seven were not detected in indoor air in the September 2017 sampling event: acrolein, chloroform, hexachlorobutadiene, naphthalene, tetrachloroethene, 1,1,2,2-tetrachloroethane, and 1,2,3-trichloropropane.
- Concentrations of benzene, 1,4-dichlorobenzene, ethylbenzene, n-hexane, 1,2,4-trichlorobenzene, and 1,2,4-trimethylbenzene in September 2017 were below VISLs, well within the historical range, and consistent with typical background indoor air levels. Due to recent updates to trimethylbenzene toxicity values in the EPA's Integrated Risk Information System database, the EPA's current (June 2017) indoor air VISL for 1,2,4-trimethylbenzene ($26 \mu\text{g}/\text{m}^3$) is approximately an order of magnitude higher than the previous value ($3.1 \mu\text{g}/\text{m}^3$). No current or historical concentrations of 1,2,4-trimethylbenzene are greater than the current indoor air VISL.

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- TCE was detected in September 2017 at concentrations similar to those in the March 2016, August 2016, and March 2017 post-mitigation events and at much lower concentrations than in prior, pre-mitigation events, but will continue to be retained for further evaluation.

5 EVALUATION OF RETAINED CONSTITUENTS

This section presents the additional evaluation of potential cancer risks and non-cancer hazards for the single constituent that was retained for further evaluation in Building 59 after the updated screening described in Section 4 – i.e., TCE. This evaluation was conducted in accordance with the procedures and approach specified in EPA's conditional approval letters of September 12, 2013 and March 12, 2015 and was based on comparison to values developed by EPA. In accordance with EPA's February 1, 2016 conditional approval letter, risk calculations are no longer presented for the cumulative dataset; risks are calculated for post-mitigation data only, with additional, separate calculations using only the most current (September 2017) dataset. However, GE notes again that it believes that the appropriate criteria for evaluation of potential risks from indoor air exposures in this building, which is occupied solely by workers, are the OSHA workplace standards, the NIOSH guidelines, and the ACGIH TLVs. All concentrations of TCE ever detected in this building are far below those occupational standards and guidelines, as shown for the prior data in Attachment F-4 to the Winter 2014 Indoor Air Report, Attachment D to the Winter 2015 Indoor Air Report, Attachment D to the Winter 2016 Indoor Air Report, Attachment D to the Summer 2016 Indoor Air Report, Attachment D to the Winter 2017 Indoor Air Report and Attachment D to this report.⁶

5.1 Evaluation for Building 59

As noted, TCE was the only constituent in Building 59 that has been retained for further assessment following the initial screening and weight-of-evidence screening steps. Based on the TCE data from all post-mitigation sampling events in that building, the event-specific and average TCE concentrations at each sample location, as well as the overall building-wide average, are shown in Table 7, and the TCE results for each location and the building-wide average are shown for each event on Figure 3. In calculating averages, duplicate sample results were averaged with the parent sample.

Based on the average concentrations shown in Table 7, and as directed in EPA's March 12, 2015 and February 1, 2016 conditional approval letters the cancer risks and non-cancer hazards have been evaluated for TCE at each sampling location, as well as for Building 59 as a whole. These calculations were performed using the risk evaluation procedure specified in EPA's September 12, 2013 letter. The results of these risk calculations are presented in Table 8. These calculations show that, at each location and building-wide, the estimated excess cancer risks for TCE are well below a risk level of 1×10^{-5} . For non-cancer hazards, the HI is below 1 for each location and for the building as a whole. These results are similar to the event-specific results presented in the Winter 2015, Winter 2016, Summer 2016, and Winter 2017 Indoor Air Reports, which show that the mitigation system has successfully eliminated the historical exceedance of an HI of 1 at location 59-IA-2.

As directed in EPA's September 10, 2015 and February 1, 2016 conditional approval letters, GE has repeated the cancer risk and non-cancer hazard calculations using the event-specific data from September 2017 (i.e., the latest event) for TCE. The results of these calculations are presented on Table

⁶ The maximum concentration of TCE ever detected in Building 59 (0.0077 ppm), detected in 2006, is orders of magnitude below the OSHA standard, the NIOSH guideline, and the ACGIH TLV for TCE (100, 25, and 10 ppm, respectively).

9. The results show that, at each location (including 59-IA-2) and building-wide, the estimated excess cancer risks for TCE are well below a risk level of 1×10^{-5} . Non-cancer hazards for TCE are well below an HI of 1, at each location and building-wide.

Given that these post-mitigation sampling results indicate no unacceptable cancer risk or non-cancer hazard in Building 59, including at location 59-IA-2, based on an assumption of a full work-day exposure of 8 hours, it is not necessary to calculate risks from part-day exposures of less than 8 hours, since such exposure would likewise necessarily result in no unacceptable risks.

In addition, consistent with EPA's March 12, 2015 letter, GE has compared the TCE concentrations at each location and building-wide, as set forth in Table 7, with the "accelerated response action level" of $8 \mu\text{g}/\text{m}^3$ and the "urgent response action level" of $24 \mu\text{g}/\text{m}^3$ specified for 8-hour commercial/industrial exposures. As shown in Table 7, none of the post-mitigation results for TCE are greater than the action level of $8 \mu\text{g}/\text{m}^3$ or the urgent response action level of $24 \mu\text{g}/\text{m}^3$.

Similar to the evaluations in the Winter 2016, Summer 2016, and Winter 2017 Reports, the results of these evaluations show the effectiveness of the SSDS in reducing indoor air concentrations in Building 59 to levels that do not present unacceptable risk. Based on these evaluations, no further mitigation is recommended in Building 59. As discussed in Section 5, GE will continue to conduct operational maintenance and monitoring to verify that the SSDS is operating as intended.

5.2 Uncertainty Assessment

As directed in the EPA's February 1, 2016 conditional approval letter, GE has evaluated the variation in sampling duration and its impact on data quality and use in the risk calculations.

As noted in Section 2.2, with the exception of the duplicate indoor air sample collected at location 59-IA-3, all paired sub-slab soil gas and indoor air samples were collected generally over the same period of time (within 45 minutes of each other) with all samples being collected for no less than the target sampling duration of 8 hours. Due to an equipment error, sample collection of the duplicate indoor air sample collected at location 59-IA-3 commenced approximately 1.5 hours after the parent sample, and sample duration was approximately 7 hours and 6 minutes. The three primary indoor air samples were collected for 8 hours and 15 minutes, 8 hours and 48 minutes, and 8 hours and 58 minutes respectively. As the indoor air samples were collected for at least 8 hours, and final canister pressures were between -4 and -8.75 inches of mercury, no calibration or operational issues with flow controllers are indicated that would impact data quality. As each indoor air sample was collected for at least 8 hours, and within an hour of the 8-hour target sampling duration, each sample is also considered adequately representative of potential worker exposure. Furthermore, the limited uncertainty associated with the difference in sampling variation (spanning approximately an hour and 15 minutes) is unlikely to contribute significantly to an underestimate or overestimate of potential risk.

6 UPDATED SUMMARY OF SSDS MONITORING ACTIVITIES

Since April 2016, portions of Building 59 have been under the influence of the SSDS. The Winter 2016 Indoor Air Report described the pilot testing, the installation and components of the SSDS, and the initial testing to confirm that the target area of mitigation (including the library cubicle area) was within the zone of influence of the SSDS. As described in that report, the Building 59 SSDS consists of two 4"-diameter Sub-slab Depressurization Sumps, SDS-1 and SDS-2, which were designed to extract sub-slab vapors from the full extent of the library cubicle area. The SSDS configuration includes these two depressurization sumps, a low-pressure/lowflow vacuum blower (Gasho, JG15K-3039), and related piping and controls to extract soil gas from beneath the floor slab and discharge it to the outside atmosphere. The layout of these components is shown on Figure 4A and 4B.

As presented in Attachment G- SSDS OM&M Field Logs and Data, GE conducted the Semi-annual(June) and 3rd Quarter(September) SSDS inspections, measurements, as well as sub-slab differential pressure testing. Both of these events consisted of using a hand-held micromanometer on to confirm that the target area of mitigation was within the zone of influence of the SSDS. As shown on Figure 4A and 4B, differential-pressure readings for the 10 vacuum monitoring points (VMP-1 through VMP-10) confirmed that the target slab area requiring mitigation, including the full extent of the library cubicle area, has a sufficient pressure differential to prevent vapor intrusion within the zone of influence.

System analytical results from SDS-1, SDS-2, Pre-Dilution and Effluent sample points are presented on Table G-1 which include current results from the June and September 2017 O&M Rounds. The resulting effluent emission rate was calculated using the flow rate measured off the system blower noted at the time, approximately 50 cfm. The total VOC concentrations in the effluent sample were rounded up to include the method detection limits for non-detected compounds (1,595 µg/m³ in June and 2,300 µg/m³ in September 2017, respectively). As shown on Table G-2, based on the system operating continuously, the estimated maximum emission rate was calculated to be 2.62 lbs/year for June and 3.77 lbs/year for September 2017, well below the Massachusetts regulatory threshold of 100 lbs/year for treatment of remedial off-gas emissions of volatile constituents from an SSDS, as specified in 310 CMR 40.0049(3)(a) and MassDEP Policy #WSC-94-150, *Off-Gas Treatment of Point-Source Remedial Air Emissions* (1994). Thus, carbon treatment continues to be unnecessary for the SSDS effluent discharge.

7 PROGRAM SCHEDULE

7.1 Schedule of Future Field and Reporting Activities

EPA has not yet approved the proposed program modifications outlined in the Winter 2017 report. However, once approved the next annual SSDS sampling will be conducted in November/December 2017. The results from this event will be summarized in the “Building 59 SSDS O&M Report- Fall 2017”, and submitted to EPA within 60 Days following the receipt of validated laboratory analytical data. After the fall/winter 2017 annual SSDS sampling and monitoring round are conducted, the next SSDS monitoring event will be the summer 2018 semi-annual system monitoring scheduled for July/August, followed by with the winter annual SSDS sampling and monitoring round to be conducted in fall/winter of 2017.

Future annual reports will be termed as the “Annual Building 59 SSDS O&M Report”, which will consist of the summer semi-annual system monitoring results from July/August, and the fall/winter annual SSDS monitoring that includes the annual sump/effluent sample results. This report will be submitted to EPA within 60 Days following the receipt of validated analytical results from the fall/winter annual sampling event, generally in January/February of each year.

GE will conduct the next round of indoor air sampling and analysis for Building 59 in the winter of 2022. GE will notify EPA at least seven days prior to that sampling event. GE will submit a report on that event (the Winter 2022 Indoor Air Assessment Summary Report for Building 59) within 60 days of the receipt of a validated analytical laboratory data report from that event.

The next biennial indoor air and sub-slab gas sampling event in Building 51 is currently scheduled to be conducted in the first Quarter(February/March) of 2018. GE will submit a report on that event (Indoor Air Assessment Summary Report for Building 51- Winter 2018) within 60 days of the receipt of a validated analytical laboratory data report from that event, with future Building 51 assessments being included with the Annual Building 59 SSDS O&M Report.

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TABLES



Table 1
Summary of TCE Concentrations in Indoor Air in Building 59 Using Pre-Mitigation Data

Indoor Air Investigation and Assessment Summary Report for Building 59 – Summer 2017
Groundwater Management Area 3
General Electric Company – Pittsfield, Massachusetts

Sample Identification		Building 59 (µg/m³)			
		Result	RL	MDL	Value Used
59-IA-1	9/28/2006	5.7	--	--	5.7
	10/11/2007	ND	5.4	1.1	1.1
	10/29/2008	3.8 J	--	--	3.8
	10/20/2009	1.6 J	--	--	1.6
	11/18/2010	ND	4.4	1.1	1.1
	10/20/2011	0.99 J	--	--	0.99
	10/25/2012	3.4 J	--	--	3.4
	3/12/2014	4.4 J	--	--	4.4
	3/31/2015	2.0	--	--	2
Location Mean					2.7
59-IA-2	9/28/2006	41	--	--	41
	10/11/2007	15	--	--	15
	10/29/2008	15	--	--	15
	10/20/2009	7.9	--	--	7.9
	11/18/2010	5.7	--	--	5.7
	10/20/2011	1.1	--	--	1.1
	10/25/2012	9.2	--	--	9.2
	3/12/2014	31	--	--	31
	3/31/2015	26	--	--	26
Location Mean					17
59-IA-3	9/28/2006*	9.1	--	--	9.1
	10/11/2007	4.7 J	--	--	4.7
	10/29/2008	4.2 J	--	--	4.2
	10/20/2009	3.6 J	--	--	3.6
	11/18/2010	1.5 J	--	--	1.5
	10/20/2011	1.4	--	--	1.4
	1/8/2013**	5.9 [6.8]	--	--	6.4
	3/12/2014	7.6 [6.9]	--	--	7.3
	3/31/2015	7.3 [7.1]	--	--	7.2
Location Mean					5.0
Building Mean					8.2

Notes:

59-IA-1: Facility Area
59-IA-2: Library Area
59-IA-3: Lobby Area

J = estimated concentration
MDL = method detection limit
ND = non-detect

RL = reporting limit
µg/m³ = micrograms per cubic meter

Field duplicate sample results are presented in brackets.

* This summary does not include the results from a second sample collected at 59-IA-3 on 9/28/2006, which was marked as a duplicate sample, but was incorrectly collected at an increased rate and over a shorter period of time than duplicate samples in subsequent years.

** This summary does not include the results from the anomalous sample collected at 59-IA-3 on 10/25/2012, which was likely affected by maintenance activities in the building and was replaced by the sample collected on 1/8/2013.

Table 2
Risk Calculations for TCE in Building 59 Using Average Pre-Mitigation Data

Indoor Air Investigation and Assessment Summary Report for Building 59 – Summer 2017
Groundwater Management Area 3
General Electric Company – Pittsfield, Massachusetts

Building 59														
Constituent	Commercial Indoor Air VISL ¹		Average Indoor Air Concentration (µg/m ³)				Estimated Cancer Risk ²				Estimated Non-Cancer Hazard ³			
	CR=1E-06	HQ =1	59-IA-1	59-IA-2	59-IA-3	Bldg	59-IA-1	59-IA-2	59-IA-3	Bldg	59-IA-1	59-IA-2	59-IA-3	Bldg
Trichloroethene	3.0	8.8	2.7	17	5.0	8.2	9E-07	6E-06	2E-06	3E-06	0.31	1.9	0.57	0.93
Cumulative for building (rounded):							9E-07	6E-06	2E-06	3E-06	0.3	2	0.6	0.9

Notes:

1. In accordance with EPA's conditional approval letter dated September 12, 2013, the indoor air vapor intrusion screening levels (VISLs) used in this evaluation for trichloroethene are EPA's commercial indoor air VISLs based on an excess cancer risk (CR) level of 1×10^{-6} and a non-cancer hazard quotient (HQ) of 1.
2. Estimated cancer risks from each constituent were calculated as follows:

$$\text{Cancer Risk} = \left(\frac{\text{Average Indoor Air Concentration}}{\text{Cancer - Based VISL}} \right) (1 \times 10^{-6})$$

Cancer risks for each constituent were then summed to determine the total cancer risk.

3. Estimated non-cancer hazards from each constituent were calculated as follows:

$$\text{Non - Cancer Hazard} = \frac{\text{Average Indoor Air Concentration}}{\text{Non - Cancer - Based VISL}}$$

Non-cancer hazard quotients for each constituent were then summed to determine the total hazard index.

VISL = Vapor Intrusion Screening Level

CR = cancer risk level

HQ = hazard quotient

Bldg = building-wide

µg/m³ = micrograms per cubic meter

Table 3
Summary of September 2017 Analytical Data for Building 59 - Indoor Air

Indoor Air Investigation and Assessment Summary Report for Building 59 – Summer 2017
Groundwater Management Area 3
General Electric Company - Pittsfield, Massachusetts
(Results are presented in ug/m3)

Location ID: Date Collected: Sample Name:		Units	Facility Area 09/01/17 59-IA-1	Library Area 09/01/17 59-IA-2	Lobby Area 09/01/17 59-IA-3
Volatile Organics					
1,1,2,2-Tetrachloroethane	0.21	ug/m3	ND(1.1){0.24}	ND(1.1){0.24}	ND(1.1){0.23} [ND(1.3){0.27}]
1,2,3-Trichloropropane	0.13	ug/m3	ND(5){1.2}	ND(5){1.2}	ND(4.9){1.2} [ND(5.6){1.4}]
1,2,4-Trimethylbenzene	26	ug/m3	0.22 J	0.32 J	0.16 J [0.21 J]
Acetonitrile	26	ug/m3	ND(1.4){0}	ND(1.4){0}	ND(1.4){0} [ND(1.6){0}]
Acrolein	0.0088	ug/m3	ND(1.9){0}	ND(1.9){0}	ND(1.8){0} [ND(2.1){0}]
Benzene	1.6	ug/m3	0.2 J	0.33 J	0.24 J [0.21 J]
Bromomethane	2.2	ug/m3	ND(3.2){0.6}	ND(3.2){0.59}	ND(3.1){0.58} [ND(3.6){0.67}]
Carbon Disulfide	310	ug/m3	ND(2.6){0.29}	ND(2.6){0.28}	ND(2.5){0.28} [ND(2.9){0.32}]
Chloroform	0.53	ug/m3	ND(0.82){0.19}	ND(0.8){0.19}	ND(0.79){0.19} [ND(0.91){0.22}]
Ethyl acetate	31	ug/m3	ND(3){1}	ND(3){1}	ND(2.9){0.99} [ND(3.4){1.1}]
Ethylbenzene	4.9	ug/m3	ND(0.72){0.13}	0.17 J	ND(0.7){0.12} [ND(0.81){0.14}]
m&p-Xylene	--	ug/m3	ND(0.72){0.22}	0.62 J	0.34 J [0.31 J]
Methyl tert-butyl ether	47	ug/m3	ND(0.6){0.19}	ND(0.59){0.19}	ND(0.58){0.18} [ND(0.67){0.21}]
n-Hexane	310	ug/m3	1	6.5	1.9 [2.1]
o-Xylene	44	ug/m3	ND(0.72){0.19}	0.21 J	ND(0.7){0.18} [ND(0.81){0.21}]
Tetrachloroethene	18	ug/m3	ND(1.1){0.27}	ND(1.1){0.26}	ND(1.1){0.26} [ND(1.3){0.3}]
Toluene	2,200	ug/m3	1.7	13	3.4 [4.2]
Trichloroethene	0.88	ug/m3	0.57 J	1	0.3 J [ND(1){0.29}]
Trichlorofluoromethane	--	ug/m3	14	54	22 [27]
Semivolatile Organics					
1,2,4-Trichlorobenzene	0.88	ug/m3	0.76 J	ND(6.1){0.3}	ND(6){0.3} [ND(6.9){0.34}]
1,4-Dichlorobenzene	1.1	ug/m3	ND(1){0.17}	1.1	0.36 J [0.42 J]
Hexachlorobutadiene	0.56	ug/m3	ND(8.9){1.4}	ND(8.8){1.4}	ND(8.6){1.4} [ND(10){1.6}]
Naphthalene	0.36	ug/m3	ND(4.4){0.21}	ND(4.3){0.21}	ND(4.2){0.21} [ND(4.9){0.24}]

Notes:

1. Samples were collected by Arcadis and submitted for analysis of the above-listed VOCs and SVOCs by EPA Method TO-15 to Eurofins-Air Toxics Laboratory in Folsom, California.
 2. Sample results have been validated in accordance with GE's approved Field Sampling Plan/Quality Assurance Project Plan (July 2013).
 3. The VISL (vapor intrusion screening level) value presented is the lower of the commercial scenario indoor air VISLs based on a target cancer risk (CR) of 1×10^{-6} or a target non-cancer hazard quotient (HQ) of 0.1.
 4. ND – Analyte was not detected. The number in parentheses is the associated reporting limit. The number in curly brackets is the method detection limit.
 5. Field duplicate sample results are presented in brackets.
 6. Shading indicates that the value exceeds the applicable VISL.
- J - Indicates that the associated numerical value is an estimated value.
 $\mu\text{g}/\text{m}^3$ = micrograms per cubic meter

Table 4
Summary of September 2017 Analytical Data for Building 59 - Sub-Slab Soil Gas

Indoor Air Investigation and Assessment Summary Report for Building 59 – Summer 2017
Groundwater Management Area 3
General Electric Company - Pittsfield, Massachusetts
(Results are presented in ug/m³)

Location ID: Date Collected: Sample Name:	Units	Facility Area 09/01/17 59-SS-1	Library Area 09/01/17 59-SS-2	Lobby Area 09/01/17 59-SS-3
Volatile Organics				
1,1,2,2-Tetrachloroethane	ug/m ³	ND(5.9){1.2}	ND(1.1){0.24}	ND(1.1){0.23}
1,2,3-Trichloropropane	ug/m ³	ND(26){6.3}	ND(4.9){1.2}	ND(4.8){1.2}
1,2,4-Trimethylbenzene	ug/m ³	1.5 J	0.87	1
Acetonitrile	ug/m ³	ND(7.2){0}	ND(1.4){0}	ND(1.3){0}
Acrolein	ug/m ³	ND(9.8){0}	ND(1.9){0}	ND(1.8){0}
Benzene	ug/m ³	0.55 J	0.26 J	0.44 J
Bromomethane	ug/m ³	ND(17){3.1}	ND(3.2){0.59}	ND(3.1){0.58}
Carbon Disulfide	ug/m ³	ND(13){1.5}	ND(2.6){0.28}	ND(2.5){0.28}
Chloroform	ug/m ³	87	0.41 J	1.2
Ethyl acetate	ug/m ³	ND(15){5.2}	ND(3){1}	ND(2.9){0.98}
Ethylbenzene	ug/m ³	0.67 J	0.27 J	0.25 J
m&p-Xylene	ug/m ³	2 J	1.2	1.5
Methyl tert-butyl ether	ug/m ³	ND(3.1){0.98}	ND(0.59){0.19}	ND(0.58){0.18}
n-Hexane	ug/m ³	ND(3){0.58}	0.4 J	ND(0.56){0.11}
o-Xylene	ug/m ³	ND(3.7){0.97}	0.49 J	0.5 J
Tetrachloroethene	ug/m ³	15	0.83 J	2.2
Toluene	ug/m ³	1.7 J	1.6	1.3
Trichloroethene	ug/m ³	1,300	51	66
Trichlorofluoromethane	ug/m ³	3.8 J	49	36
Semivolatile Organics				
1,2,4-Trichlorobenzene	ug/m ³	ND(32){1.6}	0.37 J	ND(5.9){0.29}
1,4-Dichlorobenzene	ug/m ³	ND(5.1){0.85}	ND(0.99){0.16}	ND(0.96){0.16}
Hexachlorobutadiene	ug/m ³	ND(46){7.4}	ND(8.7){1.4}	ND(8.5){1.4}
Naphthalene	ug/m ³	ND(22){1.1}	ND(4.3){0.21}	ND(4.2){0.2}

Notes:

1. Samples were collected by Arcadis and submitted for analysis of the above-listed VOCs and SVOCs by EPA Method TO-15 to Eurofins-Air Toxics Laboratory in Folsom, California.
2. Sample results have been validated in accordance with GE's approved Field Sampling Plan/Quality Assurance Project Plan (July 2013).
3. ND – Analyte was not detected. The number in parentheses is the associated reporting limit.
J - Indicates that the associated numerical value is an estimated value.
µg/m³ = micrograms per cubic meter

Table 5
Cumulative Summary of Sub-Slab Soil Gas Data for Building 59

Indoor Air Investigation and Assessment Summary Report for Building 59 - Summer 2017
Groundwater Management Area 3
General Electric Company - Pittsfield, Massachusetts
(Results are presented in ug/m3)

Location ID: Date Collected: Sample Name:	Units	Facility Area 09/28/06 Summa Canister #0073	Facility Area 10/11/07 59-SS-1	Facility Area 10/29/08 59-SS-1	Facility Area 10/20/09 59-SS-1	Facility Area 11/18/10 59-SS-01	Facility Area 10/20/11 59-SS-1	Facility Area 10/25/12 59-SS-1
Volatile Organics								
1,1,1,2-Tetrachloroethane	ug/m3	ND(6.9){1.4}	ND(6.9){1.4}	ND(6.9){1.4}	ND(6.9){1.4}	ND(6.9){1.4}	NA	ND(69){14} [ND(6.9){1.4}]
1,1,1-Trichloroethane	ug/m3	ND(5.5){1.1}	1.9 J	3.9 J	4.6 J	6.3	8.5 J	ND(55){11} [6]
1,1,2,2-Tetrachloroethane	ug/m3	ND(6.9){1.4}	ND(6.9){1.4}	ND(6.9){1.4}	ND(6.9){1.4}	ND(6.9){1.4}	ND(14){2.7}	ND(69){14} [1.6 J]
1,1,2-trichloro-1,2,2-trifluoroethane	ug/m3	ND(7.7){3.8}	ND(7.7){3.8}	ND(15){3.8}	ND(15){3.8}	ND(15){3.8}	ND(15){0.77}	ND(150){38} [ND(15){3.8}]
1,1,2-Trichloroethane	ug/m3	ND(5.5){1.1}	ND(5.5){1.1}	ND(5.5){1.1}	ND(5.5 J){1.1}	ND(5.5){1.1}	ND(11){1}	ND(55){11} [ND(5.5){1.1}]
1,1-Dichloroethane	ug/m3	ND(4){0.81}	ND(4){0.81}	ND(4){0.81}	ND(4){0.81}	ND(4){0.81}	ND(8.1){1.4}	ND(40){8.1} [ND(4){0.81}]
1,1-Dichloroethene	ug/m3	ND(4){0.79}	ND(4){0.79}	ND(4){0.79}	ND(4){0.79}	ND(4){0.79}	ND(7.9){1.2}	ND(40){7.9} [ND(4){0.79}]
1,2,3-Trichloropropane	ug/m3	ND(6){1.2}	ND(6){1.2}	1.6 J	ND(6){1.2}	ND(6){1.2}	NA	ND(60){12} [1.4 J]
1,2,4-Trimethylbenzene	ug/m3	8.8	1.3 J	ND(4.9){0.98}	ND(4.9){0.98}	6.7	ND(9.8){2.6}	ND(49){9.8} [5.1]
1,2-Dibromo-3-chloropropane	ug/m3	NA	NA	NA	NA	NA	NA	ND(970){970} [ND(97){97}]
1,2-Dibromoethane	ug/m3	ND(7.7){1.5}	ND(7.7){1.5}	ND(7.7){1.5}	ND(7.7){1.5}	ND(7.7){1.5}	ND(15){1.4}	ND(77){15} [ND(7.7){1.5}]
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ug/m3	ND(7){1.4}	ND(7){1.4}	ND(7){1.4}	ND(7){1.4}	ND(7){1.4}	ND(14){2.2}	ND(70){14} [ND(7){1.4}]
1,2-Dichloroethane	ug/m3	ND(4){0.81}	ND(4){0.81}	ND(4){0.81}	ND(4){0.81}	ND(4){0.81}	ND(8.1){1.3}	ND(40){8.1} [ND(4){0.81}]
1,2-Dichloroethene (total)	ug/m3	NA	NA	NA	NA	NA	1.3 J	NA
1,2-Dichloropropane	ug/m3	ND(4.6){0.92}	ND(4.6){0.92}	ND(4.6){0.92}	ND(4.6){0.92}	ND(4.6){0.92}	ND(9.2){0.65}	ND(46){9.2} [ND(4.6){0.92}]
1,3,5-Trimethylbenzene	ug/m3	ND(4.9){0.98}	ND(4.9){0.98}	ND(4.9){0.98}	ND(4.9){0.98}	1.5 J	ND(9.8){2.5}	ND(49){9.8} [3.1 J]
1,3-Butadiene	ug/m3	ND(4.4){1.1}	ND(4.4){1.1}	ND(4.4){1.1}	ND(4.4){1.1}	ND(4.4){1.1}	ND(14){0.22}	ND(44){8.8} [ND(4.4){0.88}]
1,4-Dioxane	ug/m3	ND(3.6){0.72}	ND(3.6){0.72}	ND(3.6){0.72}	ND(3.6 J){0.72}	ND(3.6){0.72}	ND(180){3.2}	ND(36){18} [ND(3.6){1.8}]
2-Butanone	ug/m3	47	7.2	19	7.7	12	2 J	ND(59){15} [ND(5.9){1.5}]
2-Chlorotoluene	ug/m3	NA	NA	NA	NA	NA	ND(10){2.4}	NA
2-Hexanone	ug/m3	ND(8.2){2}	ND(8.2){2}	3.9 J	ND(8.2){2}	ND(8.2){2}	ND(20){1.6}	ND(82){20} [ND(8.2){2}]
3-Chloropropene	ug/m3	ND(3.1){0.63}	ND(3.1){1.6}	ND(3.1){0.63}	ND(3.1){0.63}	ND(3.1){0.63}	ND(16){0.59}	ND(31){6.3} [ND(3.1){0.63}]
4-Ethyltoluene	ug/m3	ND(4.9){0.98}	1.5 J	ND(4.9){0.98}	ND(4.9){0.98}	ND(4.9){0.98}	ND(9.8){2.3}	ND(49){9.8} [3.1 J]
4-Methyl-2-pentanone	ug/m3	ND(8.2){2}	ND(8.2){2}	ND(8.2){2}	ND(8.2){2}	ND(8.2){2}	ND(20){1.1}	ND(82){20} [ND(8.2){2}]
Acetone	ug/m3	53	25	95	200	90 J	36 J	14 J [11]
Acetonitrile	ug/m3	ND(3.4){0.84}	ND(3.4 J){0.84}	2.4 J	ND(3.4){0.84}	0.86 J	NA	ND(34){8.4} [0.97 J]
Acrolein	ug/m3	ND(4.6){1.1}	1.2 J	3.6 J	ND(4.6){1.1}	ND(4.6){1.1}	NA	ND(46){11} [ND(4.6){1.1}]
Acrylonitrile	ug/m3	ND(4.3){1.1}	ND(4.3){1.1}	ND(4.3){1.1}	ND(4.3){1.1}	ND(4.3){1.1}	NA	ND(43){11} [ND(4.3){1.1}]
Alpha Methyl Styrene	ug/m3	ND(4.8){0.97}	10 J	1.1 J	ND(4.8){0.97}	ND(4.8){0.97}	NA	ND(48){9.7} [5]
alpha-Pinene	ug/m3	NA	NA	NA	NA	NA	NA	ND(0){0} [ND(0){0}]
Benzene	ug/m3	0.73 J	12	1.3 J	ND(3.2){0.64}	0.69 J	1.1 J	ND(32){6.4} [1.9 J]
Bromobenzene	ug/m3	ND(6.4){1.3}	ND(6.4){1.3}	ND(6.4){1.3}	ND(6.4){1.3}	ND(6.4){1.3}	NA	ND(64){13} [1.7 J]
Bromodichloromethane	ug/m3	ND(6.7){1.3}	ND(6.7){1.3}	ND(6.7){1.3}	ND(6.7){1.3}	ND(6.7){1.3}	ND(13){1.9}	ND(67){13} [ND(6.7){1.3}]
Bromoethene	ug/m3	NA	NA	NA	NA	NA	ND(8.7){0.83}	NA
Bromoform	ug/m3	ND(10){2.1}	ND(10){2.1}	ND(10){2.1}	ND(10){2.1}	ND(10){2.1}	ND(21){2}	ND(100){21} [2.2 J]
Bromomethane	ug/m3	ND(3.9){0.78}	0.97 J	ND(3.9){0.78}	ND(3.9){0.78}	ND(3.9){0.78}	ND(7.8){0.47}	ND(39){7.8} [ND(3.9){0.78}]
Carbon Disulfide	ug/m3	ND(3.1){0.62}	5.9	2.8 J	0.9 J	5.6	ND(16){2.1}	ND(31){16} [1.6 J]
Carbon Tetrachloride	ug/m3	ND(6.3){1.3}	110	210	59	110	250	210 [250]
Chlorobenzene	ug/m3	ND(4.6){0.92}	ND(4.6){0.92}	ND(4.6){0.92}	ND(4.6){0.92}	ND(4.6){0.92}	ND(9.2){0.92}	ND(46){9.2} [1 J]

Table 5
Cumulative Summary of Sub-Slab Soil Gas Data for Building 59

Indoor Air Investigation and Assessment Summary Report for Building 59 - Summer 2017
Groundwater Management Area 3
General Electric Company - Pittsfield, Massachusetts
(Results are presented in ug/m3)

Location ID: Date Collected: Sample Name:	Units	Facility Area 09/28/06 Summa Canister #0073	Facility Area 10/11/07 59-SS-1	Facility Area 10/29/08 59-SS-1	Facility Area 10/20/09 59-SS-1	Facility Area 11/18/10 59-SS-01	Facility Area 10/20/11 59-SS-1	Facility Area 10/25/12 59-SS-1
Volatile Organics								
Chlorodifluoromethane	ug/m3	0.99 J	0.71 J	ND(3.5){0.71}	ND(3.5){0.71}	6	ND(18){1.2}	ND(35){7.1} [ND(3.5){0.71}]
Chloroethane	ug/m3	ND(2.6){0.53}	1.5 J	ND(2.6){0.53}	ND(2.6){0.53}	ND(2.6){0.53}	ND(13){0.42}	ND(26){5.3} [ND(2.6){0.53}]
Chloroform	ug/m3	ND(4.9){0.98}	55	91	32	83	140	110 [110]
Chloromethane	ug/m3	ND(2.1){0.41}	ND(2.1){0.41}	ND(2.1){0.41}	ND(2.1){0.41}	ND(2.1){0.41}	ND(10){0.27}	ND(21){4.1} [ND(2.1){0.41}]
cis-1,2-Dichloroethene	ug/m3	ND(4){0.79}	ND(4){0.79}	ND(4){0.79}	ND(4){0.79}	ND(4){0.79}	1.3 J	ND(40){7.9} [0.86 J]
cis-1,3-Dichloropropene	ug/m3	ND(4.5){0.91}	ND(4.5){0.91}	ND(4.5){0.91}	ND(4.5){0.91}	ND(4.5){0.91}	ND(9.1){0.73}	ND(45){9.1} [ND(4.5){0.91}]
Cyclohexane	ug/m3	NA	NA	NA	NA	NA	ND(6.9){1.3}	ND(34){6.9} [ND(3.4){0.69}]
Dibromochloromethane	ug/m3	ND(8.5){1.7}	ND(8.5){1.7}	ND(8.5){1.7}	ND(8.5){1.7}	ND(8.5){1.7}	ND(17){1.8}	ND(85){17} [ND(8.5){1.7}]
Dibromomethane	ug/m3	ND(7.1){1.4}	ND(7.1){1.4}	ND(7.1){1.4}	ND(7.1){1.4}	ND(7.1){1.4}	NA	ND(71){14} [ND(7.1){1.4}]
Dichlorodifluoromethane	ug/m3	1.7 J	2.4 J	2.5 J	2.2 J	2.8 J	ND(25){1.9}	ND(49){9.9} [3.3 J]
Dichlorofluoromethane	ug/m3	ND(4.2){0.84}	ND(4.2){0.84}	ND(4.2){0.84}	ND(4.2){0.84}	ND(4.2){0.84}	NA	ND(42){8.4} [ND(4.2){0.84}]
d-Limonene	ug/m3	NA	NA	NA	NA	NA	NA	ND(0){0} [ND(0){0}]
Ethanol	ug/m3	NA	NA	NA	NA	NA	NA	230 J [110 J]
Ethyl acetate	ug/m3	ND(3.6){0.72}	ND(3.6){0.72}	ND(3.6){0.72}	ND(3.6){0.72}	ND(3.6){0.72}	NA	ND(36){18} [ND(3.6){1.8}]
Ethyl Acrylate	ug/m3	ND(4.1){0.82}	ND(4.1){0.82}	ND(4.1){0.82}	ND(4.1){0.82}	ND(4.1){0.82}	NA	ND(41){8.2} [ND(4.1){0.82}]
Ethyl Methacrylate	ug/m3	ND(4.7){0.93}	ND(4.7){0.93}	ND(4.7){0.93}	ND(4.7){0.93}	ND(4.7){0.93}	NA	ND(47){9.3} [ND(4.7){0.93}]
Ethylbenzene	ug/m3	3.1 J	3.7 J	ND(4.3){0.87}	ND(4.3){0.87}	ND(4.3){0.87}	1.1 J	ND(43){8.7} [14]
Heptane	ug/m3	1.4 J	1.6 J	ND(4.1){0.82}	ND(4.1){0.82}	ND(4.1){0.82}	0.93 J	ND(41){8.2} [ND(4.1){0.82}]
Iodomethane	ug/m3	ND(5.8){1.2}	ND(5.8){1.2}	ND(5.8){1.2}	ND(5.8){1.2}	ND(5.8){1.2}	NA	ND(58){12} [ND(5.8){1.2}]
Isooctane	ug/m3	1.8 J	2.1 J	ND(4.7){0.93}	ND(4.7){0.93}	ND(4.7){0.93}	ND(9.3){1.7}	ND(47){9.3} [ND(4.7){0.93}]
Isopropyl alcohol	ug/m3	NA	NA	NA	NA	NA	3 J	ND(25){12} [ND(2.5){1.2}]
Isopropylbenzene	ug/m3	ND(4.9){0.98}	3.3 J	1.9 J	1.4 J	1.4 J	ND(9.8){1.5}	ND(49){9.8} [ND(4.9){0.98}]
m&p-Xylene	ug/m3	5.2	5.9	2 J	ND(4.3){0.87}	7.4	NA	9.7 J [36]
Methyl Acrylate	ug/m3	ND(3.5){0.7}	ND(3.5){0.7}	ND(3.5){0.7}	ND(3.5){0.7}	ND(3.5){0.7}	NA	ND(35){7} [ND(3.5){0.7}]
Methyl Methacrylate	ug/m3	ND(4.1){0.82}	ND(4.1){0.82}	ND(4.1){0.82}	ND(4.1){0.82}	ND(4.1){0.82}	ND(20){0.53}	ND(41){8.2} [ND(4.1){0.82}]
Methyl tert-butyl ether	ug/m3	260	5.2	ND(3.6){0.72}	ND(3.6){0.72}	ND(3.6){0.72}	ND(7.2){0.58}	ND(36){7.2} [ND(3.6){0.72}]
Methylene Chloride	ug/m3	3.3 J	ND(3.5){0.69}	ND(3.5){0.69}	ND(3.5){0.69}	0.75 J	ND(17){0.45}	ND(35){6.9} [0.87 J]
n-Butane	ug/m3	NA	NA	NA	NA	NA	ND(12){0.26}	NA
n-Butyl Acetate	ug/m3	NA	NA	NA	NA	NA	NA	ND(0){0} [ND(0){0}]
n-Butylbenzene	ug/m3	NA	NA	NA	NA	NA	ND(11){3}	NA
n-Hexane	ug/m3	62	15	1.1 J	1 J	ND(3.5){0.7}	ND(7){0.92}	ND(35){7} [ND(3.5){0.7}]
n-Octane	ug/m3	ND(4.7){0.93}	3.7 J	ND(4.7){0.93}	ND(4.7){0.93}	ND(4.7){0.93}	NA	ND(47){9.3} [4.9]
Nonane	ug/m3	NA	NA	NA	NA	NA	NA	ND(0){0} [ND(0){0}]
n-Propylbenzene	ug/m3	NA	NA	NA	NA	NA	ND(9.8){2.5}	ND(49){9.8} [1.1 J]
o-Xylene	ug/m3	2.5 J	2.2 J	ND(4.3){0.87}	ND(4.3){0.87}	1.3 J	NA	ND(43){8.7} [19]
Pentane	ug/m3	1.9 J	2.2 J	1.7 J	0.66 J	ND(3){0.59}	NA	ND(30){5.9} [ND(3){0.59}]
p-Isopropyltoluene	ug/m3	NA	NA	NA	NA	NA	ND(11){2.6}	NA
Propene	ug/m3	ND(1.7){0.34}	1.9	4.2	1.5 J	1 J	NA	ND(17){3.4} [ND(1.7){0.34}]
sec-Butylbenzene	ug/m3	NA	NA	NA	NA	NA	ND(11){2.6}	NA

Table 5
Cumulative Summary of Sub-Slab Soil Gas Data for Building 59

Indoor Air Investigation and Assessment Summary Report for Building 59 - Summer 2017
Groundwater Management Area 3
General Electric Company - Pittsfield, Massachusetts
(Results are presented in ug/m3)

Location ID: Date Collected: Sample Name:	Units	Facility Area 09/28/06 Summa Canister #0073	Facility Area 10/11/07 59-SS-1	Facility Area 10/29/08 59-SS-1	Facility Area 10/20/09 59-SS-1	Facility Area 11/18/10 59-SS-01	Facility Area 10/20/11 59-SS-1	Facility Area 10/25/12 59-SS-1
Volatile Organics								
Styrene	ug/m3	ND(4.3){0.85}	ND(4.3){0.85}	1.4 J	ND(4.3){0.85}	ND(4.3){0.85}	ND(8.5){1.3}	ND(43){8.5} [2 J]
tert-Butylbenzene	ug/m3	NA	NA	NA	NA	NA	ND(11){2.6}	NA
Tertiary butyl alcohol	ug/m3	ND(3){0.61}	3.2	3.5	ND(3){0.61}	ND(3){0.61}	ND(150){2.2}	ND(30){15} [ND(3){1.5}]
Tetrachloroethene	ug/m3	ND(6.8){1.4}	4.5 J	14	4.8 J	15	15	16 J [22]
Toluene	ug/m3	8.4	40	6.7	0.97 J	2.8 J	3.6 J	ND(38){7.5} [5.2]
trans-1,2-Dichloroethene	ug/m3	ND(4){0.79}	ND(4){0.79}	ND(4){0.79}	ND(4){0.79}	ND(4){0.79}	ND(7.9){1.3}	ND(40){7.9} [ND(4){0.79}]
trans-1,3-Dichloropropene	ug/m3	ND(4.5){0.91}	ND(4.5){0.91}	ND(4.5){0.91}	ND(4.5 J){0.91}	ND(4.5){0.91}	ND(9.1){0.91}	ND(45){9.1} [ND(4.5){0.91}]
Trichloroethene	ug/m3	5.3 J	540	1,100	700	1,300	1,700	1,600 [1,700]
Trichlorofluoromethane	ug/m3	15	5.6	3.5 J	3.5 J	2.6 J	5.3 J	ND(56){11} [3.6 J]
Vinyl Acetate	ug/m3	ND(3.5){0.7}	ND(3.5){0.7}	ND(3.5){0.7}	ND(3.5){1.8}	ND(3.5){1.8}	NA	ND(35){18} [ND(3.5){1.8}]
Vinyl Chloride	ug/m3	ND(2.6){0.51}	ND(2.6){0.51}	ND(2.6){0.51}	ND(2.6){0.51}	ND(2.6){0.51}	ND(5.1){0.74}	ND(26){5.1} [ND(2.6){0.51}]
Xylenes (total)	ug/m3	NA	NA	NA	NA	NA	5.5 J	NA
Semivolatile Organics								
1,2,4-Trichlorobenzene	ug/m3	8.8 J	ND(15){3.7}	ND(15){3.7}	ND(15){3.7}	ND(15){3.7}	ND(37 J){3.7}	ND(150){37} [4.2 J]
1,2-Dichlorobenzene	ug/m3	ND(6){1.2}	ND(6){1.8}	ND(6){1.2}	ND(6){1.2}	ND(6){1.2}	ND(12){2.9}	ND(60){12} [5.6 J]
1,3-Dichlorobenzene	ug/m3	ND(6){1.2}	ND(6){1.8}	ND(6){1.2}	ND(6){1.2}	ND(6){1.2}	ND(12){2.6}	ND(60){12} [5.2 J]
1,4-Dichlorobenzene	ug/m3	ND(6){1.2}	ND(6){1.8}	ND(6){1.2}	ND(6){1.2}	ND(6){1.2}	ND(12){2.6}	ND(60){12} [6]
Benzyl Chloride	ug/m3	NA	NA	NA	NA	NA	ND(10){2.4}	ND(52){26} [ND(5.2){2.6}]
Hexachlorobutadiene	ug/m3	ND(21){5.3}	ND(21){5.3}	ND(21){5.3}	ND(21){5.3}	ND(21){5.3}	ND(21){6.9}	ND(210){43} [ND(21){4.3}]
Hexachloroethane	ug/m3	ND(9.7){1.9}	ND(9.7){1.9}	3 J	ND(9.7){1.9}	ND(9.7){1.9}	NA	ND(97){19} [2 J]
Naphthalene	ug/m3	ND(5.2){2.1}	8	ND(5.2){2.1}	4.8 J	17	ND(26 J){4.5}	ND(100){21} [7.6 J]
Tetrahydrofuran	ug/m3	NA	NA	NA	NA	NA	ND(150){0.53}	ND(29){5.9} [ND(2.9){0.59}]

Table 5
Cumulative Summary of Sub-Slab Soil Gas Data for Building 59

Indoor Air Investigation and Assessment Summary Report for Building 59 - Summer 2017
Groundwater Management Area 3
General Electric Company - Pittsfield, Massachusetts
(Results are presented in ug/m3)

Location ID: Date Collected: Sample Name:	Units	Facility Area 03/12/14 59-SS-1	Facility Area 03/31/15 59-SS-1	Facility Area 03/16/16 59-SS-1	Facility Area 08/24/16 59-SS-1	Facility Area 03/17/17 59-SS-1	Facility Area 09/01/17 59-SS-1	Library Area 10/11/07 59-SS-2	Library Area 10/29/08 59-SS-2
Volatile Organics									
1,1,1,2-Tetrachloroethane	ug/m3	NA	NA	NA	NA	NA	NA	ND(6.9){1.4}	ND(6.9){1.4}
1,1,1-Trichloroethane	ug/m3	4.2 J	NA	NA	NA	NA	NA	44	60
1,1,2,2-Tetrachloroethane	ug/m3	ND(6.4){1.2}	ND(7.3){0.87}	ND(6){0.81}	ND(7.1){0.95}	ND(7.4){1.7}	ND(5.9){1.2}	ND(6.9){1.4}	ND(6.9){1.4}
1,1,2-trichloro-1,2,2-trifluoroethane	ug/m3	ND(7.1){2.4}	NA	NA	NA	NA	NA	ND(7.7){3.8}	ND(15){3.8}
1,1,2-Trichloroethane	ug/m3	ND(5.1){1.4}	NA	NA	NA	NA	NA	ND(5.5){1.1}	ND(5.5){1.1}
1,1-Dichloroethane	ug/m3	ND(3.8){0.84}	NA	NA	NA	NA	NA	ND(4){0.81}	ND(4){0.81}
1,1-Dichloroethene	ug/m3	ND(3.7){0.94}	NA	NA	NA	NA	NA	ND(4){0.79}	ND(4){0.79}
1,2,3-Trichloropropane	ug/m3	NA	ND(32){32}	ND(26){5.2}	ND(31){6.2}	ND(32){2.5}	ND(26){6.3}	ND(6){1.2}	ND(6){1.2}
1,2,4-Trimethylbenzene	ug/m3	1.3 J	0.76 J	ND(4.3){0.96}	ND(5.1 J){1.1}	ND(5.3){1}	1.5 J	3.8 J	1.9 J
1,2-Dibromo-3-chloropropane	ug/m3	ND(36){36}	NA	NA	NA	NA	NA	NA	NA
1,2-Dibromoethane	ug/m3	ND(7.1){1.6}	NA	NA	NA	NA	NA	ND(7.7){1.5}	ND(7.7){1.5}
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ug/m3	ND(6.5){2.2}	NA	NA	NA	NA	NA	ND(7){1.4}	ND(7){1.4}
1,2-Dichloroethane	ug/m3	ND(3.8){1.2}	NA	NA	NA	NA	NA	ND(4){0.81}	ND(4){0.81}
1,2-Dichloroethene (total)	ug/m3	NA	NA	NA	NA	NA	NA	NA	NA
1,2-Dichloropropane	ug/m3	ND(4.3){1.8}	NA	NA	NA	NA	NA	ND(4.6){0.92}	ND(4.6){0.92}
1,3,5-Trimethylbenzene	ug/m3	ND(4.6){0.71}	NA	NA	NA	NA	NA	ND(4.9){0.98}	ND(4.9){0.98}
1,3-Butadiene	ug/m3	ND(2){0.4}	NA	NA	NA	NA	NA	ND(4.4){1.1}	ND(4.4){1.1}
1,4-Dioxane	ug/m3	ND(13){2.4}	NA	NA	NA	NA	NA	ND(3.6){0.72}	ND(3.6){0.72}
2-Butanone	ug/m3	2.3 J	NA	NA	NA	NA	NA	10	ND(5.9){1.5}
2-Chlorotoluene	ug/m3	NA	NA	NA	NA	NA	NA	NA	NA
2-Hexanone	ug/m3	ND(15){1.8}	NA	NA	NA	NA	NA	ND(8.2){2}	3.3 J
3-Chloropropene	ug/m3	ND(12){1.4}	NA	NA	NA	NA	NA	ND(3.1){1.6}	ND(3.1){0.63}
4-Ethyltoluene	ug/m3	1.4 J	NA	NA	NA	NA	NA	1.3 J	ND(4.9){0.98}
4-Methyl-2-pentanone	ug/m3	ND(3.8){0.69}	NA	NA	NA	NA	NA	2.5 J	ND(8.2){2}
Acetone	ug/m3	9.3 J	NA	NA	NA	NA	NA	37	100
Acetonitrile	ug/m3	ND(16){16}	ND(8.9){8.9}	ND(7.3){7.3}	ND(8.6){8.6}	ND(9.1){9.1}	ND(7.2){0}	ND(3.4 J){0.84}	ND(3.4){0.84}
Acrolein	ug/m3	ND(85){85}	ND(12){12}	10 J	ND(12){12}	ND(14){14}	ND(9.8){0}	1.3 J	ND(4.6){1.1}
Acrylonitrile	ug/m3	ND(8.1){8.1}	NA	NA	NA	NA	NA	ND(4.3){1.1}	ND(4.3){1.1}
Alpha Methyl Styrene	ug/m3	NA	NA	NA	NA	NA	NA	ND(4.8 J){0.97}	ND(4.8){0.97}
alpha-Pinene	ug/m3	ND(52){52}	NA	NA	NA	NA	NA	NA	NA
Benzene	ug/m3	ND(3){0.68}	ND(3.4){0.51}	ND(2.8){0.29}	1.8 J	ND(3.4){0.58}	0.55 J	1.5 J	1.9 J
Bromobenzene	ug/m3	NA	NA	NA	NA	NA	NA	ND(6.4){1.3}	ND(6.4){1.3}
Bromodichloromethane	ug/m3	ND(6.2){1.5}	NA	NA	NA	NA	NA	ND(6.7){1.3}	ND(6.7){1.3}
Bromoethene	ug/m3	NA	NA	NA	NA	NA	NA	NA	NA
Bromoform	ug/m3	ND(9.6){2}	NA	NA	NA	NA	NA	ND(10){2.1}	ND(10){2.1}
Bromomethane	ug/m3	ND(36){2.3}	ND(20){2}	ND(17){2.9}	ND(20){3.4}	ND(21){2.9}	ND(17){3.1}	ND(3.9){0.78}	ND(3.9){0.78}
Carbon Disulfide	ug/m3	ND(12){0.59}	ND(16){6.7}	ND(14){3.7}	ND(16){4.4}	ND(17){2.9}	ND(13){1.5}	1.9 J	5.2
Carbon Tetrachloride	ug/m3	200	NA	NA	NA	NA	NA	ND(6.3){1.3}	2.1 J
Chlorobenzene	ug/m3	ND(4.3){0.67}	NA	NA	NA	NA	NA	ND(4.6){0.92}	ND(4.6){0.92}

Table 5
Cumulative Summary of Sub-Slab Soil Gas Data for Building 59

Indoor Air Investigation and Assessment Summary Report for Building 59 - Summer 2017
Groundwater Management Area 3
General Electric Company - Pittsfield, Massachusetts
(Results are presented in ug/m3)

Location ID: Date Collected: Sample Name:	Units	Facility Area 03/12/14 59-SS-1	Facility Area 03/31/15 59-SS-1	Facility Area 03/16/16 59-SS-1	Facility Area 08/24/16 59-SS-1	Facility Area 03/17/17 59-SS-1	Facility Area 09/01/17 59-SS-1	Library Area 10/11/07 59-SS-2	Library Area 10/29/08 59-SS-2
Volatile Organics									
Chlorodifluoromethane	ug/m3	NA	NA	NA	NA	NA	NA	5.6	ND(3.5){0.71}
Chloroethane	ug/m3	ND(9.8){1}	NA	NA	NA	NA	NA	ND(2.6){0.53}	ND(2.6){0.53}
Chloroform	ug/m3	120	89	83	87	68	87	17	22
Chloromethane	ug/m3	ND(19){1.2}	NA	NA	NA	NA	NA	ND(2.1){0.41}	ND(2.1){0.41}
cis-1,2-Dichloroethene	ug/m3	ND(3.7){0.71}	NA	NA	NA	NA	NA	1 J	1.2 J
cis-1,3-Dichloropropene	ug/m3	ND(4.2){0.74}	NA	NA	NA	NA	NA	ND(4.5){0.91}	ND(4.5){0.91}
Cyclohexane	ug/m3	ND(3.2){0.89}	NA	NA	NA	NA	NA	NA	NA
Dibromochloromethane	ug/m3	ND(7.9){1.9}	NA	NA	NA	NA	NA	ND(8.5){1.7}	ND(8.5){1.7}
Dibromomethane	ug/m3	NA	NA	NA	NA	NA	NA	ND(7.1){1.4}	ND(7.1){1.4}
Dichlorodifluoromethane	ug/m3	3 J	NA	NA	NA	NA	NA	130	120
Dichlorofluoromethane	ug/m3	NA	NA	NA	NA	NA	NA	ND(4.2){0.84}	ND(4.2){0.84}
d-Limonene	ug/m3	ND(21){21}	NA	NA	NA	NA	NA	NA	NA
Ethanol	ug/m3	ND(7){2.7}	NA	NA	NA	NA	NA	NA	NA
Ethyl acetate	ug/m3	ND(13){13}	ND(19){19}	ND(16){16}	ND(18){18}	ND(19){19}	ND(15){5.2}	ND(3.6){0.72}	ND(3.6){0.72}
Ethyl Acrylate	ug/m3	NA	NA	NA	NA	NA	NA	ND(4.1){0.82}	ND(4.1){0.82}
Ethyl Methacrylate	ug/m3	NA	NA	NA	NA	NA	NA	ND(4.7){0.93}	ND(4.7){0.93}
Ethylbenzene	ug/m3	ND(4){1.1}	ND(4.6){0.5}	ND(3.8){1}	ND(4.5){1.2}	ND(4.7){1.3}	0.67 J	2.9 J	1.9 J
Heptane	ug/m3	ND(3.8){1.2}	NA	NA	NA	NA	NA	ND(4.1){0.82}	ND(4.1){0.82}
Iodomethane	ug/m3	NA	NA	NA	NA	NA	NA	ND(5.8){1.2}	ND(5.8){1.2}
Isooctane	ug/m3	ND(4.3){0.34}	NA	NA	NA	NA	NA	1 J	ND(4.7){0.93}
Isopropyl alcohol	ug/m3	1.1 J	NA	NA	NA	NA	NA	NA	NA
Isopropylbenzene	ug/m3	ND(4.6){0.9}	NA	NA	NA	NA	NA	ND(4.9){0.98}	ND(4.9){0.98}
m&p-Xylene	ug/m3	2.4 J	1.1 J	ND(3.8){0.76}	1.9 J	1.5 J	2 J	4.4	4.4
Methyl Acrylate	ug/m3	NA	NA	NA	NA	NA	NA	ND(3.5){0.7}	ND(3.5){0.7}
Methyl Methacrylate	ug/m3	ND(38){38}	NA	NA	NA	NA	NA	ND(4.1){0.82}	ND(4.1){0.82}
Methyl tert-butyl ether	ug/m3	ND(3.4){0.45}	ND(3.8){0.46}	ND(3.2){0.83}	ND(3.7){0.98}	ND(3.9){0.8}	ND(3.1){0.98}	ND(3.6){0.72}	ND(3.6){0.72}
Methylene Chloride	ug/m3	ND(32){1.6}	NA	NA	NA	NA	NA	0.76 J	ND(3.5){0.69}
n-Butane	ug/m3	NA	NA	NA	NA	NA	NA	NA	NA
n-Butyl Acetate	ug/m3	ND(44){44}	NA	NA	NA	NA	NA	NA	NA
n-Butylbenzene	ug/m3	NA	NA	NA	NA	NA	NA	NA	NA
n-Hexane	ug/m3	ND(3.3){0.7}	ND(3.7){0.76}	ND(3.1){1.7}	ND(3.6 J){2}	ND(3.8){0.86}	ND(3){0.58}	26	21
n-Octane	ug/m3	ND(17){17}	NA	NA	NA	NA	NA	1 J	7
Nonane	ug/m3	ND(20){20}	NA	NA	NA	NA	NA	NA	NA
n-Propylbenzene	ug/m3	ND(4.6){0.69}	NA	NA	NA	NA	NA	NA	NA
o-Xylene	ug/m3	ND(4){0.83}	ND(4.6){0.88}	ND(3.8){0.87}	ND(4.5){1}	ND(4.7){0.61}	ND(3.7){0.97}	1.7 J	2 J
Pentane	ug/m3	NA	NA	NA	NA	NA	NA	2.6 J	30
p-Isopropyltoluene	ug/m3	NA	NA	NA	NA	NA	NA	NA	NA
Propene	ug/m3	ND(6.4){1.2}	NA	NA	NA	NA	NA	3.9	13
sec-Butylbenzene	ug/m3	NA	NA	NA	NA	NA	NA	NA	NA

Table 5
Cumulative Summary of Sub-Slab Soil Gas Data for Building 59

Indoor Air Investigation and Assessment Summary Report for Building 59 - Summer 2017
 Groundwater Management Area 3
 General Electric Company - Pittsfield, Massachusetts
 (Results are presented in ug/m3)

Location ID: Date Collected: Sample Name:	Units	Facility Area 03/12/14 59-SS-1	Facility Area 03/31/15 59-SS-1	Facility Area 03/16/16 59-SS-1	Facility Area 08/24/16 59-SS-1	Facility Area 03/17/17 59-SS-1	Facility Area 09/01/17 59-SS-1	Library Area 10/11/07 59-SS-2	Library Area 10/29/08 59-SS-2
Volatile Organics									
Styrene	ug/m3	ND(4){1}	NA	NA	NA	NA	NA	ND(4.3){0.85}	ND(4.3){0.85}
tert-Butylbenzene	ug/m3	NA	NA	NA	NA	NA	NA	NA	NA
Tertiary butyl alcohol	ug/m3	NA	NA	NA	NA	NA	NA	1.1 J	ND(3){0.61}
Tetrachloroethene	ug/m3	17	12	13	16	13	15	13	41
Toluene	ug/m3	2.4 J	1.2 J	ND(3.3){0.63}	1.6 J	ND(4.1){0.65}	1.7 J	6.2	7.1
trans-1,2-Dichloroethene	ug/m3	ND(3.7){1.1}	NA	NA	NA	NA	NA	0.99 J	ND(4){0.79}
trans-1,3-Dichloropropene	ug/m3	ND(4.2){1}	NA	NA	NA	NA	NA	ND(4.5){0.91}	ND(4.5){0.91}
Trichloroethene	ug/m3	2,000	1,400	1,200	1,600	1,000	1,300	1,700	2,300
Trichlorofluoromethane	ug/m3	2 J	1.3 J	2 J	3.2 J	1.3 J	3.8 J	250	260
Vinyl Acetate	ug/m3	ND(13){3.3}	NA	NA	NA	NA	NA	ND(3.5){0.7}	ND(3.5){0.7}
Vinyl Chloride	ug/m3	ND(2.4){0.48}	NA	NA	NA	NA	NA	ND(2.6){0.51}	ND(2.6){0.51}
Xylenes (total)	ug/m3	NA	NA	NA	NA	NA	NA	NA	NA
Semivolatile Organics									
1,2,4-Trichlorobenzene	ug/m3	ND(28){4}	ND(39){2.4}	ND(32){2.7}	ND(38){3.1}	ND(40){2.5}	ND(32){1.6}	ND(15){3.7}	ND(15){3.7}
1,2-Dichlorobenzene	ug/m3	ND(5.6){1.1}	NA	NA	NA	NA	NA	ND(6){1.8}	ND(6){1.2}
1,3-Dichlorobenzene	ug/m3	ND(5.6){0.9}	NA	NA	NA	NA	NA	ND(6){1.8}	ND(6){1.2}
1,4-Dichlorobenzene	ug/m3	ND(5.6){1.1}	ND(6.4){1.2}	ND(5.3){0.91}	ND(6.2){1.1}	ND(6.5){1.4}	ND(5.1){0.85}	ND(6){1.8}	ND(6){1.2}
Benzyl Chloride	ug/m3	ND(4.8){0.68}	NA	NA	NA	NA	NA	NA	NA
Hexachlorobutadiene	ug/m3	ND(40){6.8}	ND(56){2.1}	ND(47){3}	ND(55){3.6}	ND(58){3.4}	ND(46){7.4}	ND(21){5.3}	ND(21){5.3}
Hexachloroethane	ug/m3	NA	NA	NA	NA	NA	NA	ND(9.7){1.9}	ND(9.7){1.9}
Naphthalene	ug/m3	0.77 J	0.75 J	ND(23){0.85}	1 J	ND(28){0.92}	ND(22){1.1}	ND(5.2){2.1}	ND(5.2){2.1}
Tetrahydrofuran	ug/m3	ND(2.7){0.47}	NA	NA	NA	NA	NA	NA	NA

Table 5
Cumulative Summary of Sub-Slab Soil Gas Data for Building 59

Indoor Air Investigation and Assessment Summary Report for Building 59 - Summer 2017
Groundwater Management Area 3
General Electric Company - Pittsfield, Massachusetts
(Results are presented in ug/m3)

Location ID: Date Collected: Sample Name:	Units	Library Area 10/20/09 59-SS-2	Library Area 11/18/10 59-SS-02	Library Area 10/20/11 59-SS-2	Library Area 10/25/12 59-SS-2	Library Area 03/12/14 59-SS-2	Library Area 03/31/15 59-SS-2	Library Area 03/16/16 59-SS-2	Library Area 08/24/16 59-SS-2
Volatile Organics									
1,1,1,2-Tetrachloroethane	ug/m3	ND(6.9){1.4}	ND(6.9){1.4}	NA	ND(69){14}	NA	NA	NA	NA
1,1,1-Trichloroethane	ug/m3	26	30	36	37 J	22	NA	NA	NA
1,1,2,2-Tetrachloroethane	ug/m3	ND(6.9){1.4}	ND(6.9){1.4}	ND(41){8.2}	ND(69){14}	ND(15){2.8}	ND(12){1.4}	ND(1.2){0.16}	ND(1.1){0.15}
1,1,2-trichloro-1,2,2-trifluoroethane	ug/m3	ND(15){3.8}	ND(15){3.8}	ND(46){2.3}	ND(150){38}	ND(16){5.6}	NA	NA	NA
1,1,2-Trichloroethane	ug/m3	ND(5.5 J){1.1}	ND(5.5){1.1}	ND(33){3.1}	ND(55){11}	ND(12){3.2}	NA	NA	NA
1,1-Dichloroethane	ug/m3	ND(4){0.81}	ND(4){0.81}	ND(24){4.2}	ND(40){8.1}	ND(8.7){1.9}	NA	NA	NA
1,1-Dichloroethene	ug/m3	ND(4){0.79}	ND(4){0.79}	ND(24){3.6}	ND(40){7.9}	ND(8.5){2.2}	NA	NA	NA
1,2,3-Trichloropropane	ug/m3	ND(6){1.2}	ND(6){1.2}	NA	ND(60){12}	NA	ND(52){52}	ND(5.1){1}	ND(4.9){0.98}
1,2,4-Trimethylbenzene	ug/m3	ND(4.9){0.98}	1.3 J	ND(29){7.7}	ND(49){9.8}	ND(10){2.5}	ND(8.6){0.76}	0.41 J	0.31 J
1,2-Dibromo-3-chloropropane	ug/m3	NA	NA	NA	ND(970){970}	ND(83){83}	NA	NA	NA
1,2-Dibromoethane	ug/m3	ND(7.7){1.5}	ND(7.7){1.5}	ND(46){4.1}	ND(77){15}	ND(16){3.8}	NA	NA	NA
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ug/m3	ND(7){1.4}	ND(7){1.4}	ND(42){6.7}	ND(70){14}	ND(15){5.1}	NA	NA	NA
1,2-Dichloroethane	ug/m3	ND(4){0.81}	ND(4){0.81}	ND(24){3.8}	ND(40){8.1}	ND(8.7){2.9}	NA	NA	NA
1,2-Dichloroethene (total)	ug/m3	NA	NA	2.9 J	NA	NA	NA	NA	NA
1,2-Dichloropropane	ug/m3	ND(4.6){0.92}	ND(4.6){0.92}	ND(28){1.9}	ND(46){9.2}	ND(9.9){4.1}	NA	NA	NA
1,3,5-Trimethylbenzene	ug/m3	ND(4.9){0.98}	ND(4.9){0.98}	ND(29){7.5}	ND(49){9.8}	ND(10){1.6}	NA	NA	NA
1,3-Butadiene	ug/m3	ND(4.4){1.1}	ND(4.4){1.1}	ND(13){0.66}	ND(44){8.8}	ND(4.8){0.93}	NA	NA	NA
1,4-Dioxane	ug/m3	ND(3.6 J){0.72}	ND(3.6){0.72}	ND(540){9.5}	ND(36){18}	ND(31){5.5}	NA	NA	NA
2-Butanone	ug/m3	5.5 J	4.8 J	4.6 J	ND(59){15}	ND(25){2.8}	NA	NA	NA
2-Chlorotoluene	ug/m3	NA	NA	ND(31){7.3}	NA	NA	NA	NA	NA
2-Hexanone	ug/m3	ND(8.2){2}	ND(8.2){2}	ND(61){4.8}	ND(82){20}	ND(35){4.2}	NA	NA	NA
3-Chloropropene	ug/m3	ND(3.1){0.63}	ND(3.1){0.63}	ND(47){1.8}	ND(31){6.3}	ND(27){3.3}	NA	NA	NA
4-Ethyltoluene	ug/m3	ND(4.9){0.98}	ND(4.9){0.98}	ND(29){6.8}	ND(49){9.8}	ND(10){2.2}	NA	NA	NA
4-Methyl-2-pentanone	ug/m3	ND(8.2){2}	ND(8.2){2}	ND(61){3.2}	ND(82){20}	ND(8.8){1.6}	NA	NA	NA
Acetone	ug/m3	90	34	35 J	28 J	8.3 J	NA	NA	NA
Acetonitrile	ug/m3	ND(3.4){0.84}	0.97 J	NA	ND(34){8.4}	ND(36){36}	ND(15){15}	ND(1.4){1.4}	ND(1.4){1.4}
Acrolein	ug/m3	ND(4.6){1.1}	ND(4.6){1.1}	NA	ND(46){11}	ND(200){200}	ND(20){20}	1.9 J	3.1
Acrylonitrile	ug/m3	ND(4.3){1.1}	ND(4.3){1.1}	NA	ND(43){11}	ND(19){19}	NA	NA	NA
Alpha Methyl Styrene	ug/m3	ND(4.8){0.97}	ND(4.8){0.97}	NA	ND(48){9.7}	NA	NA	NA	NA
alpha-Pinene	ug/m3	NA	NA	NA	ND(0){0}	ND(120){120}	NA	NA	NA
Benzene	ug/m3	1.1 J	0.84 J	3.2 J	ND(32){6.4}	ND(6.9){1.6}	ND(5.6){0.84}	ND(0.54){0.056}	0.27 J
Bromobenzene	ug/m3	ND(6.4){1.3}	ND(6.4){1.3}	NA	ND(64){13}	NA	NA	NA	NA
Bromodichloromethane	ug/m3	ND(6.7){1.3}	ND(6.7){1.3}	ND(40){5.6}	ND(67){13}	ND(14){3.5}	NA	NA	NA
Bromoethene	ug/m3	NA	NA	ND(26){2.5}	NA	NA	NA	NA	NA
Bromoform	ug/m3	ND(10){2.1}	ND(10){2.1}	ND(62){5.9}	ND(100){21}	ND(22){4.7}	NA	NA	NA
Bromomethane	ug/m3	ND(3.9){0.78}	ND(3.9){0.78}	ND(23){1.4}	ND(39){7.8}	ND(83){5.4}	ND(34){3.2}	ND(3.3){0.55}	ND(3.2){0.54}
Carbon Disulfide	ug/m3	2.5 J	ND(3.1){0.62}	ND(47){6.2}	ND(31){16}	ND(27){1.4}	ND(27){11}	ND(2.6){0.72}	ND(2.6){0.7}
Carbon Tetrachloride	ug/m3	ND(6.3){1.3}	ND(6.3){1.3}	ND(38){6.2}	ND(63){13}	ND(14){2.9}	NA	NA	NA
Chlorobenzene	ug/m3	ND(4.6){0.92}	ND(4.6){0.92}	ND(28){2.8}	ND(46){9.2}	ND(9.9){1.6}	NA	NA	NA

Table 5
Cumulative Summary of Sub-Slab Soil Gas Data for Building 59

Indoor Air Investigation and Assessment Summary Report for Building 59 - Summer 2017
Groundwater Management Area 3
General Electric Company - Pittsfield, Massachusetts
(Results are presented in ug/m3)

Location ID: Date Collected: Sample Name:	Units	Library Area 10/20/09 59-SS-2	Library Area 11/18/10 59-SS-02	Library Area 10/20/11 59-SS-2	Library Area 10/25/12 59-SS-2	Library Area 03/12/14 59-SS-2	Library Area 03/31/15 59-SS-2	Library Area 03/16/16 59-SS-2	Library Area 08/24/16 59-SS-2
Volatile Organics									
Chlorodifluoromethane	ug/m3	1.7 J	8.3	15 J	ND(35){7.1}	NA	NA	NA	NA
Chloroethane	ug/m3	ND(2.6){0.53}	ND(2.6){0.53}	ND(40){1.3}	ND(26){5.3}	ND(23){2.4}	NA	NA	NA
Chloroform	ug/m3	12	16	25 J	20 J	13	13	0.71 J	0.72 J
Chloromethane	ug/m3	ND(2.1){0.41}	ND(2.1){0.41}	ND(31){0.81}	ND(21){4.1}	ND(44){2.9}	NA	NA	NA
cis-1,2-Dichloroethene	ug/m3	ND(4){0.79}	0.93 J	2.9 J	ND(40){7.9}	ND(8.5){1.6}	NA	NA	NA
cis-1,3-Dichloropropene	ug/m3	ND(4.5){0.91}	ND(4.5){0.91}	ND(27){2.2}	ND(45){9.1}	ND(9.8){1.7}	NA	NA	NA
Cyclohexane	ug/m3	NA	NA	ND(21){4}	ND(34){6.9}	ND(7.4){2}	NA	NA	NA
Dibromochloromethane	ug/m3	ND(8.5){1.7}	ND(8.5){1.7}	ND(51){5.4}	ND(85){17}	ND(18){4.3}	NA	NA	NA
Dibromomethane	ug/m3	ND(7.1){1.4}	ND(7.1){1.4}	NA	ND(71){14}	NA	NA	NA	NA
Dichlorodifluoromethane	ug/m3	10	8.5	28 J	ND(49){9.9}	160	NA	NA	NA
Dichlorofluoromethane	ug/m3	ND(4.2){0.84}	ND(4.2){0.84}	NA	ND(42){8.4}	NA	NA	NA	NA
d-Limonene	ug/m3	NA	NA	NA	ND(0){0}	ND(48){48}	NA	NA	NA
Ethanol	ug/m3	NA	NA	NA	ND(19){9.4}	ND(16){6.2}	NA	NA	NA
Ethyl acetate	ug/m3	ND(3.6){0.72}	ND(3.6){0.72}	NA	ND(36){18}	ND(31){31}	ND(31){31}	ND(3){3}	ND(3){3}
Ethyl Acrylate	ug/m3	ND(4.1){0.82}	ND(4.1){0.82}	NA	ND(41){8.2}	NA	NA	NA	NA
Ethyl Methacrylate	ug/m3	ND(4.7 J){0.93}	ND(4.7 J){0.93}	NA	ND(47){9.3}	NA	NA	NA	NA
Ethylbenzene	ug/m3	1.4 J	3.2 J	ND(26){2.9}	ND(43){8.7}	ND(9.3){2.6}	ND(7.6){0.82}	ND(0.73){0.19}	0.2 J
Heptane	ug/m3	ND(4.1){0.82}	ND(4.1){0.82}	ND(25){1.2}	ND(41){8.2}	ND(8.8){2.8}	NA	NA	NA
Iodomethane	ug/m3	ND(5.8){1.2}	ND(5.8){1.2}	NA	ND(58){12}	NA	NA	NA	NA
Isooctane	ug/m3	ND(4.7){0.93}	ND(4.7){0.93}	ND(28){5}	ND(47){9.3}	ND(10){0.78}	NA	NA	NA
Isopropyl alcohol	ug/m3	NA	NA	ND(370){2.7}	ND(25){12}	ND(21){1.8}	NA	NA	NA
Isopropylbenzene	ug/m3	ND(4.9){0.98}	ND(4.9){0.98}	ND(29){4.6}	ND(49){9.8}	ND(10){2.1}	NA	NA	NA
m&p-Xylene	ug/m3	5	9.8	NA	ND(43){8.7}	ND(9.3){1.3}	ND(7.6){1.5}	0.65 J	0.95
Methyl Acrylate	ug/m3	ND(3.5){0.7}	ND(3.5){0.7}	NA	ND(35){7}	NA	NA	NA	NA
Methyl Methacrylate	ug/m3	ND(4.1){0.82}	ND(4.1){0.82}	ND(61){1.6}	ND(41){8.2}	ND(88){88}	NA	NA	NA
Methyl tert-butyl ether	ug/m3	ND(3.6){0.72}	ND(3.6){0.72}	ND(22){1.7}	ND(36){7.2}	ND(7.8){1}	ND(6.3){0.75}	ND(0.6){0.16}	ND(0.59){0.16}
Methylene Chloride	ug/m3	ND(3.5){0.69}	ND(3.5){0.69}	ND(52){1.4}	ND(35){6.9}	ND(75){3.8}	NA	NA	NA
n-Butane	ug/m3	NA	NA	ND(36){0.78}	NA	NA	NA	NA	NA
n-Butyl Acetate	ug/m3	NA	NA	NA	ND(0){0}	ND(100){100}	NA	NA	NA
n-Butylbenzene	ug/m3	NA	NA	ND(33){9.1}	NA	NA	NA	NA	NA
n-Hexane	ug/m3	16	12	3.7 J	ND(35){7}	ND(7.6){1.6}	ND(6.1){1.2}	ND(0.59){0.32}	ND(0.58 J){0.32}
n-Octane	ug/m3	ND(4.7){0.93}	ND(4.7){0.93}	NA	ND(47){9.3}	ND(40){40}	NA	NA	NA
Nonane	ug/m3	NA	NA	NA	ND(0){0}	ND(45){45}	NA	NA	NA
n-Propylbenzene	ug/m3	NA	NA	ND(29){7.4}	ND(49){9.8}	ND(10){1.6}	NA	NA	NA
o-Xylene	ug/m3	1.9 J	3.9 J	NA	ND(43){8.7}	ND(9.3){1.9}	ND(7.6){1.4}	0.23 J	0.27 J
Pentane	ug/m3	1.2 J	0.61 J	NA	ND(30){5.9}	NA	NA	NA	NA
p-Isopropyltoluene	ug/m3	NA	NA	ND(33){7.9}	NA	NA	NA	NA	NA
Propene	ug/m3	1.8	0.59 J	NA	ND(17){3.4}	ND(15){2.8}	NA	NA	NA
sec-Butylbenzene	ug/m3	NA	NA	ND(33){7.7}	NA	NA	NA	NA	NA

Table 5
Cumulative Summary of Sub-Slab Soil Gas Data for Building 59

Indoor Air Investigation and Assessment Summary Report for Building 59 - Summer 2017
 Groundwater Management Area 3
 General Electric Company - Pittsfield, Massachusetts
 (Results are presented in ug/m3)

Location ID: Date Collected: Sample Name:	Units	Library Area 10/20/09 59-SS-2	Library Area 11/18/10 59-SS-02	Library Area 10/20/11 59-SS-2	Library Area 10/25/12 59-SS-2	Library Area 03/12/14 59-SS-2	Library Area 03/31/15 59-SS-2	Library Area 03/16/16 59-SS-2	Library Area 08/24/16 59-SS-2
Volatile Organics									
Styrene	ug/m3	ND(4.3){0.85}	ND(4.3){0.85}	ND(26){3.8}	ND(43){8.5}	ND(9.2){2.4}	NA	NA	NA
tert-Butylbenzene	ug/m3	NA	NA	ND(33){7.7}	NA	NA	NA	NA	NA
Tertiary butyl alcohol	ug/m3	ND(3){0.61}	ND(3){0.61}	ND(450){6.5}	ND(30){15}	NA	NA	NA	NA
Tetrachloroethene	ug/m3	25	40	33 J	54 J	38	37	3.1	1.8
Toluene	ug/m3	1.8 J	2 J	6.5 J	ND(38){7.5}	ND(8.1){1.2}	ND(6.6){0.8}	0.63	0.94
trans-1,2-Dichloroethene	ug/m3	ND(4){0.79}	0.8 J	ND(24){3.8}	ND(40){7.9}	ND(8.5){2.5}	NA	NA	NA
trans-1,3-Dichloropropene	ug/m3	ND(4.5 J){0.91}	ND(4.5){0.91}	ND(27){2.7}	ND(45){9.1}	ND(9.8){2.3}	NA	NA	NA
Trichloroethene	ug/m3	2,100	2,700	3,300	3,900	2,900	3,400	250	130
Trichlorofluoromethane	ug/m3	130	140	230	270	140	170	12	51
Vinyl Acetate	ug/m3	ND(3.5){1.8}	ND(3.5){1.8}	NA	ND(35){18}	ND(30){7.6}	NA	NA	NA
Vinyl Chloride	ug/m3	ND(2.6){0.51}	ND(2.6){0.51}	ND(15){2.2}	ND(26){5.1}	ND(5.5){1.1}	NA	NA	NA
Xylenes (total)	ug/m3	NA	NA	ND(26){2.9}	NA	NA	NA	NA	NA
Semivolatile Organics									
1,2,4-Trichlorobenzene	ug/m3	ND(15){3.7}	ND(15){3.7}	ND(110 J){11}	ND(150){37}	ND(64){9.2}	ND(64){3.9}	ND(6.2){0.51}	ND(6.1){0.5}
1,2-Dichlorobenzene	ug/m3	ND(6){1.2}	ND(6){1.2}	ND(36){8.7}	ND(60){12}	ND(13){2.6}	NA	NA	NA
1,3-Dichlorobenzene	ug/m3	ND(6){1.2}	ND(6){1.2}	ND(36){7.9}	ND(60){12}	ND(13){2.1}	NA	NA	NA
1,4-Dichlorobenzene	ug/m3	ND(6){1.2}	ND(6){1.2}	ND(36){7.9}	ND(60){12}	ND(13){2.6}	ND(10){2}	ND(1){0.18}	ND(0.99){0.17}
Benzyl Chloride	ug/m3	NA	NA	ND(31){7.1}	ND(52){26}	ND(11){1.6}	NA	NA	NA
Hexachlorobutadiene	ug/m3	ND(21){5.3}	ND(21){5.3}	ND(64){21}	ND(210){43}	ND(92){16}	ND(93){3.4}	ND(9){0.58}	ND(8.7){0.57}
Hexachloroethane	ug/m3	ND(9.7){1.9}	ND(9.7){1.9}	NA	ND(97){19}	NA	NA	NA	NA
Naphthalene	ug/m3	ND(5.2 J){2.1}	ND(5.2){2.1}	ND(79 J){14}	ND(100){21}	ND(45){0.92}	ND(46){1.1}	0.34 J	0.28 J
Tetrahydrofuran	ug/m3	NA	NA	ND(440){1.6}	ND(29){5.9}	ND(6.3){1.1}	NA	NA	NA

Table 5
Cumulative Summary of Sub-Slab Soil Gas Data for Building 59

Indoor Air Investigation and Assessment Summary Report for Building 59 - Summer 2017
Groundwater Management Area 3
General Electric Company - Pittsfield, Massachusetts
(Results are presented in ug/m3)

Location ID: Date Collected: Sample Name:	Units	Library Area 03/17/17 59-SS-2	Library Area 09/01/17 59-SS-2	Lobby Area 09/28/06 Summa Canister #0061	Lobby Area 09/28/06 Summa Canister #0511	Lobby Area 10/11/07 59-SS-3
Volatile Organics						
1,1,1,2-Tetrachloroethane	ug/m3	NA	NA	ND(6.9){1.4}	ND(69){14}	ND(6.9){1.4} [ND(6.9){1.4}]
1,1,1-Trichloroethane	ug/m3	NA	NA	1.4 J	ND(55){11}	1.1 J [1.1 J]
1,1,2,2-Tetrachloroethane	ug/m3	ND(1.1){0.27}	ND(1.1){0.24}	ND(6.9){1.4}	ND(69){14}	ND(6.9){1.4} [ND(6.9){1.4}]
1,1,2-trichloro-1,2,2-trifluoroethane	ug/m3	NA	NA	ND(7.7){3.8}	ND(77){38}	ND(7.7){3.8} [ND(7.7){3.8}]
1,1,2-Trichloroethane	ug/m3	NA	NA	ND(5.5){1.1}	ND(55){11}	ND(5.5){1.1} [ND(5.5){1.1}]
1,1-Dichloroethane	ug/m3	NA	NA	ND(4){0.81}	ND(40){8.1}	ND(4){0.81} [ND(4){0.81}]
1,1-Dichloroethene	ug/m3	NA	NA	ND(4){0.79}	ND(40){7.9}	ND(4){0.79} [ND(4){0.79}]
1,2,3-Trichloropropane	ug/m3	ND(5){0.39}	ND(4.9){1.2}	ND(6){1.2}	ND(60){12}	ND(6){1.2} [ND(6){1.2}]
1,2,4-Trimethylbenzene	ug/m3	0.52 J	0.87	4.1 J	ND(49){9.8}	15 [1.3 J]
1,2-Dibromo-3-chloropropane	ug/m3	NA	NA	NA	NA	NA
1,2-Dibromoethane	ug/m3	NA	NA	ND(7.7){1.5}	ND(77){15}	ND(7.7){1.5} [ND(7.7){1.5}]
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ug/m3	NA	NA	ND(7){1.4}	ND(70){14}	ND(7){1.4} [ND(7){1.4}]
1,2-Dichloroethane	ug/m3	NA	NA	ND(4){0.81}	ND(40){8.1}	ND(4){0.81} [ND(4){0.81}]
1,2-Dichloroethene (total)	ug/m3	NA	NA	NA	NA	NA
1,2-Dichloropropane	ug/m3	NA	NA	ND(4.6){0.92}	ND(46){9.2}	ND(4.6){0.92} [ND(4.6){0.92}]
1,3,5-Trimethylbenzene	ug/m3	NA	NA	8.7	ND(49){9.8}	6.6 [ND(4.9){0.98}]
1,3-Butadiene	ug/m3	NA	NA	ND(4.4){1.1}	ND(44){11}	ND(4.4){1.1} [ND(4.4){1.1}]
1,4-Dioxane	ug/m3	NA	NA	ND(3.6){0.72}	ND(36){7.2}	ND(3.6){0.72} [ND(3.6){0.72}]
2-Butanone	ug/m3	NA	NA	ND(5.9){1.5}	50 J	6.9 [8.7]
2-Chlorotoluene	ug/m3	NA	NA	NA	NA	NA
2-Hexanone	ug/m3	NA	NA	ND(8.2){2}	ND(82){20}	ND(8.2){2} [ND(8.2){2}]
3-Chloropropene	ug/m3	NA	NA	ND(3.1){0.63}	ND(31){6.3}	ND(3.1){1.6} [ND(3.1){1.6}]
4-Ethyltoluene	ug/m3	NA	NA	3.7 J	ND(49){9.8}	6.5 [1.2 J]
4-Methyl-2-pentanone	ug/m3	NA	NA	ND(8.2){2}	ND(82){20}	ND(8.2){2} [ND(8.2){2}]
Acetone	ug/m3	NA	NA	210	200	24 [30]
Acetonitrile	ug/m3	ND(1.4){1.4}	ND(1.4){0}	ND(3.4){0.84}	58	ND(3.4 J){0.84} [ND(3.4 J){0.84}]
Acrolein	ug/m3	ND(2.2){2.2}	ND(1.9){0}	ND(4.6){1.1}	ND(46){11}	ND(4.6){1.1} [ND(4.6){1.1}]
Acrylonitrile	ug/m3	NA	NA	ND(4.3){1.1}	ND(43){11}	ND(4.3){1.1} [ND(4.3){1.1}]
Alpha Methyl Styrene	ug/m3	NA	NA	ND(4.8){0.97}	ND(48){9.7}	3.6 J [ND(4.8){0.97}]
alpha-Pinene	ug/m3	NA	NA	NA	NA	NA
Benzene	ug/m3	ND(0.53){0.089}	0.26 J	0.77 J	ND(32){6.4}	1.8 J [2 J]
Bromobenzene	ug/m3	NA	NA	ND(6.4){1.3}	ND(64){13}	1.5 J [ND(6.4){1.3}]
Bromodichloromethane	ug/m3	NA	NA	ND(6.7){1.3}	ND(67){13}	ND(6.7){1.3} [ND(6.7){1.3}]
Bromoethene	ug/m3	NA	NA	NA	NA	NA
Bromoform	ug/m3	NA	NA	ND(10){2.1}	ND(100){21}	ND(10){2.1} [ND(10){2.1}]
Bromomethane	ug/m3	ND(3.2){0.44}	ND(3.2){0.59}	ND(3.9){0.78}	ND(39){7.8}	4.5 [1.1 J]
Carbon Disulfide	ug/m3	ND(2.6){0.44}	ND(2.6){0.28}	ND(3.1){0.62}	93	1.5 J [1.1 J]
Carbon Tetrachloride	ug/m3	NA	NA	4.7 J	ND(63){13}	4.7 J [4.5 J]
Chlorobenzene	ug/m3	NA	NA	ND(4.6){0.92}	ND(46){9.2}	3 J [ND(4.6){0.92}]

Table 5
Cumulative Summary of Sub-Slab Soil Gas Data for Building 59

Indoor Air Investigation and Assessment Summary Report for Building 59 - Summer 2017
Groundwater Management Area 3
General Electric Company - Pittsfield, Massachusetts
(Results are presented in ug/m3)

Location ID: Date Collected: Sample Name:	Units	Library Area 03/17/17 59-SS-2	Library Area 09/01/17 59-SS-2	Lobby Area 09/28/06 Summa Canister #0061	Lobby Area 09/28/06 Summa Canister #0511	Lobby Area 10/11/07 59-SS-3
Volatile Organics						
Chlorodifluoromethane	ug/m3	NA	NA	ND(3.5){0.71}	20 J	1.8 J [1.9 J]
Chloroethane	ug/m3	NA	NA	ND(2.6){0.53}	65	0.84 J [ND(2.6){0.53}]
Chloroform	ug/m3	0.46 J	0.41 J	2.1 J	ND(49){9.8}	1.7 J [1.7 J]
Chloromethane	ug/m3	NA	NA	ND(2.1){0.41}	ND(21){4.1}	0.89 J [1 J]
cis-1,2-Dichloroethene	ug/m3	NA	NA	ND(4){0.79}	ND(40){7.9}	ND(4){0.79} [ND(4){0.79}]
cis-1,3-Dichloropropene	ug/m3	NA	NA	ND(4.5){0.91}	ND(45){9.1}	ND(4.5){0.91} [ND(4.5){0.91}]
Cyclohexane	ug/m3	NA	NA	NA	NA	NA
Dibromochloromethane	ug/m3	NA	NA	ND(8.5){1.7}	ND(85){17}	ND(8.5){1.7} [ND(8.5){1.7}]
Dibromomethane	ug/m3	NA	NA	ND(7.1){1.4}	ND(71){14}	ND(7.1){1.4} [ND(7.1){1.4}]
Dichlorodifluoromethane	ug/m3	NA	NA	6.1	11 J	23 [23]
Dichlorofluoromethane	ug/m3	NA	NA	ND(4.2){0.84}	ND(42){8.4}	ND(4.2){0.84} [ND(4.2){0.84}]
d-Limonene	ug/m3	NA	NA	NA	NA	NA
Ethanol	ug/m3	NA	NA	NA	NA	NA
Ethyl acetate	ug/m3	ND(3){3}	ND(3){1}	ND(3.6){0.72}	ND(36){7.2}	ND(3.6){0.72} [ND(3.6){0.72}]
Ethyl Acrylate	ug/m3	NA	NA	ND(4.1){0.82}	ND(41){8.2}	ND(4.1){0.82} [ND(4.1){0.82}]
Ethyl Methacrylate	ug/m3	NA	NA	ND(4.7){0.93}	ND(47){9.3}	ND(4.7){0.93} [ND(4.7){0.93}]
Ethylbenzene	ug/m3	0.27 J	0.27 J	1.3 J	ND(43){8.7}	4.3 J [2.6 J]
Heptane	ug/m3	NA	NA	1 J	23 J	1 J [0.94 J]
Iodomethane	ug/m3	NA	NA	ND(5.8){1.2}	ND(58){12}	ND(5.8){1.2} [ND(5.8){1.2}]
Isooctane	ug/m3	NA	NA	ND(4.7){0.93}	ND(47){9.3}	ND(4.7){0.93} [ND(4.7){0.93}]
Isopropyl alcohol	ug/m3	NA	NA	NA	NA	NA
Isopropylbenzene	ug/m3	NA	NA	ND(4.9){0.98}	ND(49){9.8}	2.9 J [1.3 J]
m&p-Xylene	ug/m3	1	1.2	2.7 J	ND(43){8.7}	19 [5.3]
Methyl Acrylate	ug/m3	NA	NA	ND(3.5){0.7}	ND(35){7}	ND(3.5){0.7} [ND(3.5){0.7}]
Methyl Methacrylate	ug/m3	NA	NA	ND(4.1){0.82}	ND(41){8.2}	ND(4.1){0.82} [ND(4.1){0.82}]
Methyl tert-butyl ether	ug/m3	ND(0.6){0.12}	ND(0.59){0.19}	12	62	0.79 J [0.72 J]
Methylene Chloride	ug/m3	NA	NA	ND(3.5){0.69}	58	ND(3.5){0.69} [0.87 J]
n-Butane	ug/m3	NA	NA	NA	NA	NA
n-Butyl Acetate	ug/m3	NA	NA	NA	NA	NA
n-Butylbenzene	ug/m3	NA	NA	NA	NA	NA
n-Hexane	ug/m3	0.61	0.4 J	9.6	85	20 [21]
n-Octane	ug/m3	NA	NA	ND(4.7){0.93}	ND(47){9.3}	3 J [2 J]
Nonane	ug/m3	NA	NA	NA	NA	NA
n-Propylbenzene	ug/m3	NA	NA	NA	NA	NA
o-Xylene	ug/m3	ND(0.72){0.094}	0.49 J	1.3 J	ND(43){8.7}	6.2 [1.9 J]
Pentane	ug/m3	NA	NA	ND(3){0.59}	27 J	2.4 J [2.5 J]
p-Isopropyltoluene	ug/m3	NA	NA	NA	NA	NA
Propene	ug/m3	NA	NA	ND(1.7){0.34}	ND(17){3.4}	5.4 [5.9]
sec-Butylbenzene	ug/m3	NA	NA	NA	NA	NA

Table 5
Cumulative Summary of Sub-Slab Soil Gas Data for Building 59

Indoor Air Investigation and Assessment Summary Report for Building 59 - Summer 2017
 Groundwater Management Area 3
 General Electric Company - Pittsfield, Massachusetts
 (Results are presented in ug/m3)

Location ID: Date Collected: Sample Name:	Units	Library Area 03/17/17 59-SS-2	Library Area 09/01/17 59-SS-2	Lobby Area 09/28/06 Summa Canister #0061	Lobby Area 09/28/06 Summa Canister #0511	Lobby Area 10/11/07 59-SS-3
Volatile Organics						
Styrene	ug/m3	NA	NA	ND(4.3){0.85}	ND(43){8.5}	2.1 J [ND(4.3){0.85}]
tert-Butylbenzene	ug/m3	NA	NA	NA	NA	NA
Tertiary butyl alcohol	ug/m3	NA	NA	0.67 J	ND(30){6.1}	4.4 [1.4 J]
Tetrachloroethene	ug/m3	0.65 J	0.83 J	ND(6.8){1.4}	ND(68){14}	20 [7]
Toluene	ug/m3	1.2	1.6	8.5	64	11 [12]
trans-1,2-Dichloroethene	ug/m3	NA	NA	ND(4){0.79}	ND(40){7.9}	ND(4){0.79} [ND(4){0.79}]
trans-1,3-Dichloropropene	ug/m3	NA	NA	ND(4.5){0.91}	ND(45){9.1}	ND(4.5){0.91} [ND(4.5){0.91}]
Trichloroethene	ug/m3	45	51	470	ND(54){11}	180 [170]
Trichlorofluoromethane	ug/m3	17	49	37	44 J	60 [60]
Vinyl Acetate	ug/m3	NA	NA	ND(3.5){0.7}	ND(35){7}	ND(3.5){0.7} [ND(3.5){0.7}]
Vinyl Chloride	ug/m3	NA	NA	ND(2.6){0.51}	ND(26){5.1}	ND(2.6){0.51} [ND(2.6){0.51}]
Xylenes (total)	ug/m3	NA	NA	NA	NA	NA
Semivolatile Organics						
1,2,4-Trichlorobenzene	ug/m3	ND(6.2){0.39}	0.37 J	6.4 J	ND(150){37}	7.5 J [ND(15){3.7}]
1,2-Dichlorobenzene	ug/m3	NA	NA	ND(6){1.2}	ND(60){12}	13 [ND(6){1.8}]
1,3-Dichlorobenzene	ug/m3	NA	NA	ND(6){1.2}	ND(60){12}	11 [ND(6){1.8}]
1,4-Dichlorobenzene	ug/m3	ND(1){0.21}	ND(0.99){0.16}	ND(6){1.2}	ND(60){12}	12 [ND(6){1.8}]
Benzyl Chloride	ug/m3	NA	NA	NA	NA	NA
Hexachlorobutadiene	ug/m3	ND(8.8){0.53}	ND(8.7){1.4}	ND(21){5.3}	ND(210){53}	57 [ND(21){5.3}]
Hexachloroethane	ug/m3	NA	NA	ND(9.7){1.9}	ND(97){19}	ND(9.7){1.9} [ND(9.7){1.9}]
Naphthalene	ug/m3	0.21 J	ND(4.3){0.21}	ND(5.2){2.1}	ND(5.2){2.1}	ND(5.2){2.1} [ND(5.2){2.1}]
Tetrahydrofuran	ug/m3	NA	NA	NA	NA	NA

Table 5
Cumulative Summary of Sub-Slab Soil Gas Data for Building 59

Indoor Air Investigation and Assessment Summary Report for Building 59 - Summer 2017
Groundwater Management Area 3
General Electric Company - Pittsfield, Massachusetts
(Results are presented in ug/m3)

Location ID: Date Collected: Sample Name:	Units	Lobby Area 10/29/08 59-SS-3	Lobby Area 10/20/09 59-SS-3	Lobby Area 11/18/10 59-SS-03	Lobby Area 10/20/11 59-SS-3
Volatile Organics					
1,1,1,2-Tetrachloroethane	ug/m3	ND(6.9){1.4} [ND(6.9){1.4}]	ND(6.9){1.4} [ND(6.9){1.4}]	ND(6.9){1.4} [ND(6.9){1.4}]	NA
1,1,1-Trichloroethane	ug/m3	1.6 J [1.5 J]	ND(5.5){1.1} [ND(5.5){1.1}]	ND(5.5){1.1} [ND(5.5){1.1}]	1 J [1.3 J]
1,1,2,2-Tetrachloroethane	ug/m3	ND(6.9){1.4} [ND(6.9){1.4}]	ND(6.9 J){1.4} [ND(6.9 J){1.4}]	ND(6.9){1.4} [ND(6.9){1.4}]	ND(3.6){0.71} [ND(4.1){0.82}]
1,1,2-trichloro-1,2,2-trifluoroethane	ug/m3	ND(15){3.8} [ND(15){3.8}]	ND(15){3.8} [ND(15){3.8}]	ND(15){3.8} [ND(15){3.8}]	4.1 [4.4 J]
1,1,2-Trichloroethane	ug/m3	ND(5.5){1.1} [ND(5.5){1.1}]	ND(5.5){1.1} [ND(5.5){1.1}]	ND(5.5){1.1} [ND(5.5){1.1}]	ND(2.8){0.27} [ND(3.3){0.31}]
1,1-Dichloroethane	ug/m3	ND(4){0.81} [ND(4){0.81}]	ND(4){0.81} [ND(4){0.81}]	ND(4){0.81} [ND(4){0.81}]	ND(2.1){0.37} [ND(2.4){0.42}]
1,1-Dichloroethene	ug/m3	ND(4){0.79} [ND(4){0.79}]	ND(4){0.79} [ND(4){0.79}]	ND(4){0.79} [ND(4){0.79}]	ND(2.1){0.31} [ND(2.4){0.36}]
1,2,3-Trichloropropane	ug/m3	ND(6){1.2} [ND(6){1.2}]	ND(6){1.2} [ND(6){1.2}]	ND(6){1.2} [ND(6){1.2}]	NA
1,2,4-Trimethylbenzene	ug/m3	ND(4.9){0.98} [ND(4.9){0.98}]	3.3 J [6.3]	6.9 [7.1]	2.9 [4.6]
1,2-Dibromo-3-chloropropane	ug/m3	NA	NA	NA	NA
1,2-Dibromoethane	ug/m3	ND(7.7){1.5} [ND(7.7){1.5}]	ND(7.7){1.5} [ND(7.7){1.5}]	ND(7.7){1.5} [ND(7.7){1.5}]	ND(4){0.36} [ND(4.6){0.41}]
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ug/m3	ND(7){1.4} [ND(7){1.4}]	ND(7){1.4} [ND(7){1.4}]	ND(7){1.4} [ND(7){1.4}]	ND(3.6){0.58} [ND(4.2){0.67}]
1,2-Dichloroethane	ug/m3	ND(4){0.81} [ND(4){0.81}]	ND(4){0.81} [ND(4){0.81}]	ND(4){0.81} [ND(4){0.81}]	ND(2.1){0.33} [ND(2.4){0.38}]
1,2-Dichloroethene (total)	ug/m3	NA	NA	NA	ND(2.1){0.14} [ND(2.4){0.17}]
1,2-Dichloropropane	ug/m3	ND(4.6){0.92} [ND(4.6){0.92}]	ND(4.6){0.92} [ND(4.6){0.92}]	ND(4.6){0.92} [ND(4.6){0.92}]	ND(2.4){0.17} [ND(2.8){0.19}]
1,3,5-Trimethylbenzene	ug/m3	ND(4.9){0.98} [ND(4.9){0.98}]	4.4 J [7.2]	7 [7.1]	0.71 J [1.1 J]
1,3-Butadiene	ug/m3	3.1 J [ND(4.4){1.1}]	ND(4.4){1.1} [ND(4.4){1.1}]	ND(4.4){1.1} [ND(4.4){1.1}]	0.55 J [0.5 J]
1,4-Dioxane	ug/m3	ND(3.6){0.72} [ND(3.6){0.72}]	ND(3.6 J){0.72} [ND(3.6 J){0.72}]	ND(3.6){0.72} [ND(3.6){0.72}]	ND(47){0.82} [ND(54){0.95}]
2-Butanone	ug/m3	18 [15]	7.7 [13]	16 [15]	3.2 J [3 J]
2-Chlorotoluene	ug/m3	NA	NA	NA	ND(2.7){0.63} [ND(3.1){0.73}]
2-Hexanone	ug/m3	3.5 J [2.7 J]	ND(8.2){2} [3.2 J]	2.9 J [3.1 J]	ND(5.3){0.42} [ND(6.1){0.48}]
3-Chloropropene	ug/m3	ND(3.1){0.63} [ND(3.1){0.63}]	ND(3.1){0.63} [ND(3.1){0.63}]	ND(3.1){0.63} [ND(3.1){0.63}]	ND(4.1){0.15} [ND(4.7){0.18}]
4-Ethyltoluene	ug/m3	ND(4.9){0.98} [ND(4.9){0.98}]	ND(4.9){0.98} [ND(4.9){0.98}]	1.4 J [1.3 J]	0.61 J [0.91 J]
4-Methyl-2-pentanone	ug/m3	ND(8.2){2} [ND(8.2){2}]	ND(8.2){2} [ND(8.2){2}]	ND(8.2){2} [ND(8.2){2}]	ND(5.3){0.28} [ND(6.1){0.32}]
Acetone	ug/m3	150 [200]	230 [340]	91 [97]	39 [44]
Acetonitrile	ug/m3	1.9 J [ND(3.4){0.84}]	ND(3.4){0.84} [ND(3.4){0.84}]	1.8 J [2.1 J]	NA
Acrolein	ug/m3	3.9 J [3.5 J]	ND(4.6 J){1.1} [ND(4.6 J){1.1}]	ND(4.6){1.1} [ND(4.6){1.1}]	NA
Acrylonitrile	ug/m3	ND(4.3){1.1} [ND(4.3){1.1}]	ND(4.3){1.1} [ND(4.3){1.1}]	ND(4.3){1.1} [ND(4.3){1.1}]	NA
Alpha Methyl Styrene	ug/m3	ND(4.8){0.97} [ND(4.8){0.97}]	ND(4.8){0.97} [ND(4.8){0.97}]	ND(4.8){0.97} [ND(4.8){0.97}]	NA
alpha-Pinene	ug/m3	NA	NA	NA	NA
Benzene	ug/m3	2.5 J [2.5 J]	1.7 J [2.2 J]	7.3 [5.5]	4.9 [6.3]
Bromobenzene	ug/m3	ND(6.4){1.3} [ND(6.4){1.3}]	ND(6.4){1.3} [ND(6.4){1.3}]	ND(6.4){1.3} [ND(6.4){1.3}]	NA
Bromodichloromethane	ug/m3	ND(6.7){1.3} [ND(6.7){1.3}]	ND(6.7){1.3} [ND(6.7){1.3}]	ND(6.7){1.3} [ND(6.7){1.3}]	ND(3.5){0.49} [ND(4){0.56}]
Bromoethene	ug/m3	NA	NA	NA	ND(2.3){0.22} [ND(2.6){0.25}]
Bromoform	ug/m3	ND(10){2.1} [ND(10){2.1}]	ND(10){2.1} [ND(10){2.1}]	ND(10){2.1} [ND(10){2.1}]	ND(5.4){0.51} [ND(6.2){0.59}]
Bromomethane	ug/m3	ND(3.9){0.78} [ND(3.9){0.78}]	ND(3.9){0.78} [ND(3.9){0.78}]	ND(3.9){0.78} [ND(3.9){0.78}]	ND(2){0.12} [ND(2.3){0.14}]
Carbon Disulfide	ug/m3	1.5 J [1.4 J]	ND(3.1){0.62} [1.4 J]	ND(3.1){0.62} [0.92 J]	3.6 J [1.2 J]
Carbon Tetrachloride	ug/m3	7.6 [7.7]	1.3 J [1.8 J]	3.8 J [5.5 J]	6.7 [9.2]
Chlorobenzene	ug/m3	ND(4.6){0.92} [ND(4.6){0.92}]	ND(4.6){0.92} [ND(4.6){0.92}]	ND(4.6){0.92} [ND(4.6){0.92}]	ND(2.4){0.24} [ND(2.7){0.27}]

Table 5
Cumulative Summary of Sub-Slab Soil Gas Data for Building 59

Indoor Air Investigation and Assessment Summary Report for Building 59 - Summer 2017
Groundwater Management Area 3
General Electric Company - Pittsfield, Massachusetts
(Results are presented in ug/m3)

Location ID: Date Collected: Sample Name:	Units	Lobby Area 10/29/08 59-SS-3	Lobby Area 10/20/09 59-SS-3	Lobby Area 11/18/10 59-SS-03	Lobby Area 10/20/11 59-SS-3
Volatile Organics					
Chlorodifluoromethane	ug/m3	ND(3.5){0.71} [ND(3.5){0.71}]	ND(3.5){0.71} [ND(3.5){0.71}]	ND(3.5){0.71} [2.6 J]	ND(4.6){0.31} [ND(5.3){0.36}]
Chloroethane	ug/m3	ND(2.6){0.53} [ND(2.6){0.53}]	ND(2.6){0.53} [ND(2.6){0.53}]	ND(2.6){0.53} [ND(2.6){0.53}]	ND(3.4){0.11} [ND(3.9){0.13}]
Chloroform	ug/m3	2 J [2.1 J]	ND(4.9){0.98} [ND(4.9){0.98}]	3.1 J [2.3 J]	2.3 J [2.8 J]
Chloromethane	ug/m3	ND(2.1){0.41} [ND(2.1){0.41}]	0.52 J [ND(2.1){0.41}]	ND(2.1){0.41} [0.81 J]	ND(2.7){0.07} [ND(3.1){0.08}]
cis-1,2-Dichloroethene	ug/m3	ND(4){0.79} [ND(4){0.79}]	ND(4){0.79} [ND(4){0.79}]	ND(4){0.79} [ND(4){0.79}]	ND(2.1){0.14} [ND(2.4){0.17}]
cis-1,3-Dichloropropene	ug/m3	ND(4.5){0.91} [ND(4.5){0.91}]	ND(4.5){0.91} [ND(4.5){0.91}]	ND(4.5){0.91} [ND(4.5){0.91}]	ND(2.4){0.19} [ND(2.7){0.22}]
Cyclohexane	ug/m3	NA	NA	NA	ND(1.8){0.35} [ND(2.1){0.4}]
Dibromochloromethane	ug/m3	ND(8.5){1.7} [ND(8.5){1.7}]	ND(8.5){1.7} [ND(8.5){1.7}]	ND(8.5){1.7} [ND(8.5){1.7}]	ND(4.4){0.47} [ND(5.1){0.53}]
Dibromomethane	ug/m3	ND(7.1){1.4} [ND(7.1){1.4}]	ND(7.1){1.4} [ND(7.1){1.4}]	ND(7.1){1.4} [ND(7.1){1.4}]	NA
Dichlorodifluoromethane	ug/m3	18 [18]	1.3 J [1.2 J]	ND(4.9){0.99} [3.2 J]	2.7 J [ND(7.4){0.56}]
Dichlorofluoromethane	ug/m3	ND(4.2){0.84} [ND(4.2){0.84}]	ND(4.2){0.84} [ND(4.2){0.84}]	ND(4.2){0.84} [ND(4.2){0.84}]	NA
d-Limonene	ug/m3	NA	NA	NA	NA
Ethanol	ug/m3	NA	NA	NA	NA
Ethyl acetate	ug/m3	ND(3.6){0.72} [ND(3.6){0.72}]	ND(3.6){0.72} [ND(3.6){0.72}]	ND(3.6){0.72} [ND(3.6){0.72}]	NA
Ethyl Acrylate	ug/m3	ND(4.1){0.82} [ND(4.1){0.82}]	ND(4.1){0.82} [ND(4.1){0.82}]	ND(4.1){0.82} [ND(4.1){0.82}]	NA
Ethyl Methacrylate	ug/m3	ND(4.7){0.93} [ND(4.7){0.93}]	ND(4.7){0.93} [ND(4.7){0.93}]	ND(4.7){0.93} [ND(4.7){0.93}]	NA
Ethylbenzene	ug/m3	ND(4.3){0.87} [ND(4.3){0.87}]	ND(4.3){0.87} [0.91 J]	1.9 J [2.5 J]	1.4 J [2 J]
Heptane	ug/m3	ND(4.1){0.82} [ND(4.1){0.82}]	ND(4.1){0.82} [0.98 J]	1.6 J [1.5 J]	2.3 [3]
Iodomethane	ug/m3	ND(5.8){1.2} [ND(5.8){1.2}]	ND(5.8){1.2} [ND(5.8){1.2}]	ND(5.8){1.2} [ND(5.8){1.2}]	NA
Isooctane	ug/m3	ND(4.7){0.93} [ND(4.7){0.93}]	ND(4.7){0.93} [ND(4.7){0.93}]	ND(4.7){0.93} [ND(4.7){0.93}]	ND(2.4){0.44} [ND(2.8){0.5}]
Isopropyl alcohol	ug/m3	NA	NA	NA	1 J [1.1 J]
Isopropylbenzene	ug/m3	ND(4.9){0.98} [ND(4.9){0.98}]	ND(4.9){0.98} [ND(4.9){0.98}]	ND(4.9){0.98} [ND(4.9){0.98}]	ND(2.6){0.4} [ND(2.9){0.46}]
m&p-Xylene	ug/m3	ND(4.3){0.87} [0.98 J]	2.6 J [3.3 J]	5.2 [6.8]	NA
Methyl Acrylate	ug/m3	ND(3.5){0.7} [ND(3.5){0.7}]	ND(3.5){0.7} [ND(3.5){0.7}]	ND(3.5){0.7} [ND(3.5){0.7}]	NA
Methyl Methacrylate	ug/m3	ND(4.1){0.82} [ND(4.1){0.82}]	ND(4.1){0.82} [ND(4.1){0.82}]	ND(4.1){0.82} [ND(4.1){0.82}]	ND(5.3){0.14} [ND(6.1){0.16}]
Methyl tert-butyl ether	ug/m3	ND(3.6){0.72} [ND(3.6){0.72}]	ND(3.6){0.72} [ND(3.6){0.72}]	ND(3.6){0.72} [ND(3.6){0.72}]	ND(1.9){0.15} [ND(2.2){0.17}]
Methylene Chloride	ug/m3	ND(3.5){0.69} [3.1 J]	2.2 J [0.95 J]	ND(3.5){0.69} [0.75 J]	ND(4.5){0.12} [ND(5.2){0.14}]
n-Butane	ug/m3	NA	NA	NA	2.3 J [1.5 J]
n-Butyl Acetate	ug/m3	NA	NA	NA	NA
n-Butylbenzene	ug/m3	NA	NA	NA	ND(2.9){0.79} [ND(3.3){0.9}]
n-Hexane	ug/m3	2 J [2.2 J]	14 [10]	ND(3.5){0.7} [7.3]	3 [3]
n-Octane	ug/m3	ND(4.7){0.93} [ND(4.7){0.93}]	ND(4.7){0.93} [1.6 J]	2 J [2.1 J]	NA
Nonane	ug/m3	NA	NA	NA	NA
n-Propylbenzene	ug/m3	NA	NA	NA	ND(2.6){0.64} [0.78 J]
o-Xylene	ug/m3	ND(4.3){0.87} [ND(4.3){0.87}]	0.88 J [1.2 J]	2.2 J [3.1 J]	NA
Pentane	ug/m3	4.1 [4.2]	1.9 J [1.8 J]	ND(3){0.59} [2.7 J]	NA
p-Isopropyltoluene	ug/m3	NA	NA	NA	ND(2.9){0.69} [ND(3.3){0.79}]
Propene	ug/m3	22 [22]	1.7 J [1.3 J]	ND(1.7){0.34} [11]	NA
sec-Butylbenzene	ug/m3	NA	NA	NA	ND(2.9){0.67} [ND(3.3){0.77}]

Table 5
Cumulative Summary of Sub-Slab Soil Gas Data for Building 59

Indoor Air Investigation and Assessment Summary Report for Building 59 - Summer 2017
 Groundwater Management Area 3
 General Electric Company - Pittsfield, Massachusetts
 (Results are presented in ug/m3)

Location ID: Date Collected: Sample Name:	Units	Lobby Area 10/29/08 59-SS-3	Lobby Area 10/20/09 59-SS-3	Lobby Area 11/18/10 59-SS-03	Lobby Area 10/20/11 59-SS-3
Volatile Organics					
Styrene	ug/m3	ND(4.3){0.85} [ND(4.3){0.85}]	ND(4.3){0.85} [0.91 J]	2.1 J [2.3 J]	0.8 J [1.2 J]
tert-Butylbenzene	ug/m3	NA	NA	NA	ND(2.9){0.67} [ND(3.3){0.77}]
Tertiary butyl alcohol	ug/m3	3.5 [3 J]	0.95 J [1.6 J]	ND(3){0.61} [ND(3){0.61}]	0.83 J [0.88 J]
Tetrachloroethene	ug/m3	11 [11]	2 J [3.7 J]	12 [13]	13 [17]
Toluene	ug/m3	4.7 [4.9]	3.8 [4.3]	9.2 [10]	5.6 [7.6]
trans-1,2-Dichloroethene	ug/m3	ND(4){0.79} [ND(4){0.79}]	ND(4){0.79} [ND(4){0.79}]	ND(4){0.79} [ND(4){0.79}]	ND(2.1){0.33} [ND(2.4){0.38}]
trans-1,3-Dichloropropene	ug/m3	ND(4.5){0.91} [ND(4.5){0.91}]	ND(4.5){0.91} [ND(4.5){0.91}]	ND(4.5){0.91} [ND(4.5){0.91}]	ND(2.4){0.24} [ND(2.7){0.27}]
Trichloroethene	ug/m3	270 [370]	43 [81]	240 [260]	300 [400]
Trichlorofluoromethane	ug/m3	33 [34]	34 [32]	ND(5.6){1.1} [13]	21 [25]
Vinyl Acetate	ug/m3	ND(3.5){0.7} [ND(3.5){0.7}]	ND(3.5){0.7} [ND(3.5){0.7}]	ND(3.5){1.8} [ND(3.5){1.8}]	NA
Vinyl Chloride	ug/m3	ND(2.6){0.51} [ND(2.6){0.51}]	ND(2.6){0.51} [ND(2.6){0.51}]	ND(2.6){0.51} [ND(2.6){0.51}]	ND(1.3){0.19} [ND(1.5){0.22}]
Xylenes (total)	ug/m3	NA	NA	NA	6.1 [9.5]
Semivolatile Organics					
1,2,4-Trichlorobenzene	ug/m3	ND(15){3.7} [ND(15){3.7}]	ND(15){3.7} [ND(15){3.7}]	ND(15){3.7} [ND(15){3.7}]	ND(9.6 J){0.96} [ND(11 J){1.1}]
1,2-Dichlorobenzene	ug/m3	ND(6){1.2} [ND(6){1.2}]	ND(6){1.2} [ND(6){1.2}]	ND(6){1.2} [ND(6){1.2}]	ND(3.1){0.75} [ND(3.6){0.86}]
1,3-Dichlorobenzene	ug/m3	ND(6){1.2} [ND(6){1.2}]	ND(6){1.2} [ND(6){1.2}]	ND(6){1.2} [ND(6){1.2}]	ND(3.1){0.69} [ND(3.6){0.79}]
1,4-Dichlorobenzene	ug/m3	ND(6){1.2} [ND(6){1.2}]	ND(6){1.2} [ND(6){1.2}]	ND(6){1.2} [ND(6){1.2}]	ND(3.1){0.69} [ND(3.6){0.79}]
Benzyl Chloride	ug/m3	NA	NA	NA	ND(2.7){0.62} [ND(3.1){0.71}]
Hexachlorobutadiene	ug/m3	ND(21){5.3} [ND(21){5.3}]	ND(21){5.3} [ND(21){5.3}]	ND(21){5.3} [ND(21){5.3}]	ND(5.5){1.8} [ND(6.4){2.1}]
Hexachloroethane	ug/m3	ND(9.7){1.9} [ND(9.7){1.9}]	ND(9.7){1.9} [ND(9.7){1.9}]	ND(9.7){1.9} [ND(9.7){1.9}]	NA
Naphthalene	ug/m3	49 [53]	120 [250]	430 [470]	34 J [52 J]
Tetrahydrofuran	ug/m3	NA	NA	NA	ND(38){0.14} [ND(44){0.16}]

Table 5
Cumulative Summary of Sub-Slab Soil Gas Data for Building 59

Indoor Air Investigation and Assessment Summary Report for Building 59 - Summer 2017
Groundwater Management Area 3
General Electric Company - Pittsfield, Massachusetts
(Results are presented in ug/m3)

Location ID: Date Collected: Sample Name:	Units	Lobby Area 10/25/12 59-SS-3	Lobby Area 03/12/14 59-SS-3	Lobby Area 03/31/15 59-SS-3	Lobby Area 03/16/16 59-SS-3	Lobby Area 08/24/16 59-SS-3	Lobby Area 03/17/17 59-SS-3	Lobby Area 09/01/17 59-SS-3
Volatile Organics								
1,1,1,2-Tetrachloroethane	ug/m3	ND(34){6.9}	NA	NA	NA	NA	NA	NA
1,1,1-Trichloroethane	ug/m3	ND(27){5.5}	ND(5){1.1}	NA	NA	NA	NA	NA
1,1,2,2-Tetrachloroethane	ug/m3	ND(34){6.9}	ND(6.4){1.2}	ND(1.1){0.14}	ND(1.2){0.16}	ND(1.1){0.15}	ND(1.1){0.27}	ND(1.1){0.23}
1,1,2-trichloro-1,2,2-trifluoroethane	ug/m3	ND(77){19}	ND(7.1){2.4}	NA	NA	NA	NA	NA
1,1,2-Trichloroethane	ug/m3	ND(27){5.5}	ND(5){1.4}	NA	NA	NA	NA	NA
1,1-Dichloroethane	ug/m3	ND(20){4}	ND(3.7){0.84}	NA	NA	NA	NA	NA
1,1-Dichloroethene	ug/m3	ND(20){4}	ND(3.7){0.93}	NA	NA	NA	NA	NA
1,2,3-Trichloropropane	ug/m3	ND(30){6}	NA	ND(5){5}	ND(5.3){1}	ND(4.8){0.96}	ND(5){0.39}	ND(4.8){1.2}
1,2,4-Trimethylbenzene	ug/m3	11 J	ND(4.5){1.1}	0.48 J	0.35 J	0.4 J	0.75 J	1
1,2-Dibromo-3-chloropropane	ug/m3	ND(480){480}	ND(36){36}	NA	NA	NA	NA	NA
1,2-Dibromoethane	ug/m3	ND(38){7.7}	ND(7.1){1.6}	NA	NA	NA	NA	NA
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ug/m3	ND(35){7}	ND(6.5){2.2}	NA	NA	NA	NA	NA
1,2-Dichloroethane	ug/m3	ND(20){4}	ND(3.7){1.2}	NA	NA	NA	NA	NA
1,2-Dichloroethene (total)	ug/m3	NA	NA	NA	NA	NA	NA	NA
1,2-Dichloropropane	ug/m3	ND(23){4.6}	ND(4.3){1.8}	NA	NA	NA	NA	NA
1,3,5-Trimethylbenzene	ug/m3	ND(25){4.9}	ND(4.5){0.7}	NA	NA	NA	NA	NA
1,3-Butadiene	ug/m3	ND(22){4.4}	ND(2){0.4}	NA	NA	NA	NA	NA
1,4-Dioxane	ug/m3	ND(18){9}	ND(13){2.4}	NA	NA	NA	NA	NA
2-Butanone	ug/m3	8.1 J	ND(11){1.2}	NA	NA	NA	NA	NA
2-Chlorotoluene	ug/m3	NA	NA	NA	NA	NA	NA	NA
2-Hexanone	ug/m3	ND(41){10}	ND(15){1.8}	NA	NA	NA	NA	NA
3-Chloropropene	ug/m3	ND(16){3.1}	ND(12){1.4}	NA	NA	NA	NA	NA
4-Ethyltoluene	ug/m3	ND(25){4.9}	ND(4.5){0.95}	NA	NA	NA	NA	NA
4-Methyl-2-pentanone	ug/m3	ND(41){10}	ND(3.8){0.68}	NA	NA	NA	NA	NA
Acetone	ug/m3	46	6.8 J	NA	NA	NA	NA	NA
Acetonitrile	ug/m3	ND(17){4.2}	ND(16){16}	ND(1.4){1.4}	ND(1.5){1.5}	ND(1.4){1.4}	ND(1.4){1.4}	ND(1.3){0}
Acrolein	ug/m3	ND(23){5.7}	ND(85){85}	ND(1.9){1.9}	2 J	2.6	ND(2.2){2.2}	ND(1.8){0}
Acrylonitrile	ug/m3	ND(22){5.4}	ND(8){8}	NA	NA	NA	NA	NA
Alpha Methyl Styrene	ug/m3	ND(24){4.8}	NA	NA	NA	NA	NA	NA
alpha-Pinene	ug/m3	ND(0){0}	ND(52){52}	NA	NA	NA	NA	NA
Benzene	ug/m3	ND(16){3.2}	0.68 J	ND(0.53){0.08}	0.53 J	0.42 J	ND(0.53){0.089}	0.44 J
Bromobenzene	ug/m3	ND(32){6.4}	NA	NA	NA	NA	NA	NA
Bromodichloromethane	ug/m3	ND(34){6.7}	ND(6.2){1.5}	NA	NA	NA	NA	NA
Bromoethene	ug/m3	NA	NA	NA	NA	NA	NA	NA
Bromoform	ug/m3	ND(52){10}	ND(9.6){2}	NA	NA	NA	NA	NA
Bromomethane	ug/m3	ND(19){3.9}	ND(36){2.3}	ND(3.2){0.31}	ND(3.4){0.57}	ND(3.1){0.53}	ND(3.2){0.44}	ND(3.1){0.58}
Carbon Disulfide	ug/m3	ND(16){7.8}	ND(12){0.58}	ND(2.6){1}	ND(2.7){0.74}	ND(2.5){0.68}	ND(2.6){0.45}	ND(2.5){0.28}
Carbon Tetrachloride	ug/m3	9.1 J	4.6 J	NA	NA	NA	NA	NA
Chlorobenzene	ug/m3	ND(23){4.6}	ND(4.2){0.67}	NA	NA	NA	NA	NA

Table 5
Cumulative Summary of Sub-Slab Soil Gas Data for Building 59

Indoor Air Investigation and Assessment Summary Report for Building 59 - Summer 2017
Groundwater Management Area 3
General Electric Company - Pittsfield, Massachusetts
(Results are presented in ug/m3)

Location ID: Date Collected: Sample Name:	Units	Lobby Area 10/25/12 59-SS-3	Lobby Area 03/12/14 59-SS-3	Lobby Area 03/31/15 59-SS-3	Lobby Area 03/16/16 59-SS-3	Lobby Area 08/24/16 59-SS-3	Lobby Area 03/17/17 59-SS-3	Lobby Area 09/01/17 59-SS-3
Volatile Organics								
Chlorodifluoromethane	ug/m3	ND(18){3.5}	NA	NA	NA	NA	NA	NA
Chloroethane	ug/m3	ND(13){2.6}	ND(9.8){1}	NA	NA	NA	NA	NA
Chloroform	ug/m3	ND(24){4.9}	2.8 J	1.6	0.85 J	1.6	0.47 J	1.2
Chloromethane	ug/m3	ND(10){2.1}	ND(19){1.2}	NA	NA	NA	NA	NA
cis-1,2-Dichloroethene	ug/m3	ND(20){4}	ND(3.7){0.71}	NA	NA	NA	NA	NA
cis-1,3-Dichloropropene	ug/m3	ND(23){4.5}	ND(4.2){0.73}	NA	NA	NA	NA	NA
Cyclohexane	ug/m3	ND(17){3.4}	ND(3.2){0.88}	NA	NA	NA	NA	NA
Dibromochloromethane	ug/m3	ND(43){8.5}	ND(7.9){1.9}	NA	NA	NA	NA	NA
Dibromomethane	ug/m3	ND(36){7.1}	NA	NA	NA	NA	NA	NA
Dichlorodifluoromethane	ug/m3	ND(25){4.9}	3.2 J	NA	NA	NA	NA	NA
Dichlorofluoromethane	ug/m3	ND(21){4.2}	NA	NA	NA	NA	NA	NA
d-Limonene	ug/m3	ND(0){0}	ND(21){21}	NA	NA	NA	NA	NA
Ethanol	ug/m3	ND(9.4){4.7}	ND(7){2.7}	NA	NA	NA	NA	NA
Ethyl acetate	ug/m3	ND(18){9}	ND(13){13}	ND(3){3}	ND(3.2){3.2}	ND(2.9){2.9}	ND(3){3}	ND(2.9){0.98}
Ethyl Acrylate	ug/m3	ND(20){4.1}	NA	NA	NA	NA	NA	NA
Ethyl Methacrylate	ug/m3	ND(23){4.7}	NA	NA	NA	NA	NA	NA
Ethylbenzene	ug/m3	15 J	ND(4){1.1}	0.22 J	0.24 J	0.57 J	0.34 J	0.25 J
Heptane	ug/m3	ND(20){4.1}	ND(3.8){1.2}	NA	NA	NA	NA	NA
Iodomethane	ug/m3	ND(29){5.8}	NA	NA	NA	NA	NA	NA
Isooctane	ug/m3	ND(23){4.7}	ND(4.3){0.34}	NA	NA	NA	NA	NA
Isopropyl alcohol	ug/m3	ND(12){6.1}	ND(9.1){0.78}	NA	NA	NA	NA	NA
Isopropylbenzene	ug/m3	ND(25){4.9}	ND(4.5){0.9}	NA	NA	NA	NA	NA
m&p-Xylene	ug/m3	45	1.2 J	0.96	0.68 J	1.2	1.6	1.5
Methyl Acrylate	ug/m3	ND(18){3.5}	NA	NA	NA	NA	NA	NA
Methyl Methacrylate	ug/m3	ND(20){4.1}	ND(38){38}	NA	NA	NA	NA	NA
Methyl tert-butyl ether	ug/m3	ND(18){3.6}	ND(3.3){0.45}	ND(0.6){0.072}	ND(0.63){0.17}	ND(0.58){0.15}	ND(0.6){0.12}	ND(0.58){0.18}
Methylene Chloride	ug/m3	ND(17){3.5}	ND(32){1.6}	NA	NA	NA	NA	NA
n-Butane	ug/m3	NA	NA	NA	NA	NA	NA	NA
n-Butyl Acetate	ug/m3	ND(0){0}	ND(44){44}	NA	NA	NA	NA	NA
n-Butylbenzene	ug/m3	NA	NA	NA	NA	NA	NA	NA
n-Hexane	ug/m3	ND(18){3.5}	ND(3.3){0.69}	0.14 J	ND(0.62){0.34}	0.32 J	ND(0.59){0.13}	ND(0.56){0.11}
n-Octane	ug/m3	ND(23){4.7}	ND(17){17}	NA	NA	NA	NA	NA
Nonane	ug/m3	ND(0){0}	ND(19){19}	NA	NA	NA	NA	NA
n-Propylbenzene	ug/m3	ND(25){4.9}	ND(4.5){0.69}	NA	NA	NA	NA	NA
o-Xylene	ug/m3	20 J	ND(4){0.83}	0.29 J	0.28 J	0.48 J	ND(0.72){0.094}	0.5 J
Pentane	ug/m3	ND(15){3}	NA	NA	NA	NA	NA	NA
p-Isopropyltoluene	ug/m3	NA	NA	NA	NA	NA	NA	NA
Propene	ug/m3	ND(8.6){1.7}	ND(6.4){1.2}	NA	NA	NA	NA	NA
sec-Butylbenzene	ug/m3	NA	NA	NA	NA	NA	NA	NA

Table 5
Cumulative Summary of Sub-Slab Soil Gas Data for Building 59

Indoor Air Investigation and Assessment Summary Report for Building 59 - Summer 2017
Groundwater Management Area 3
General Electric Company - Pittsfield, Massachusetts
(Results are presented in ug/m3)

Location ID: Date Collected: Sample Name:	Units	Lobby Area 10/25/12 59-SS-3	Lobby Area 03/12/14 59-SS-3	Lobby Area 03/31/15 59-SS-3	Lobby Area 03/16/16 59-SS-3	Lobby Area 08/24/16 59-SS-3	Lobby Area 03/17/17 59-SS-3	Lobby Area 09/01/17 59-SS-3
Volatile Organics								
Styrene	ug/m3	ND(21){4.3}	ND(3.9){1}	NA	NA	NA	NA	NA
tert-Butylbenzene	ug/m3	NA	NA	NA	NA	NA	NA	NA
Tertiary butyl alcohol	ug/m3	ND(15){7.6}	NA	NA	NA	NA	NA	NA
Tetrachloroethene	ug/m3	21 J	16	10	7.4	4.1	1.9	2.2
Toluene	ug/m3	5.9 J	1.7 J	1.1	0.99	1.2	1.5	1.3
trans-1,2-Dichloroethene	ug/m3	ND(20){4}	ND(3.7){1.1}	NA	NA	NA	NA	NA
trans-1,3-Dichloropropene	ug/m3	ND(23){4.5}	ND(4.2){1}	NA	NA	NA	NA	NA
Trichloroethene	ug/m3	430	370	290	140	99	49	66
Trichlorofluoromethane	ug/m3	ND(28){5.6}	3.5 J	2.9	14	32	9.2	36
Vinyl Acetate	ug/m3	ND(18){8.8}	ND(13){3.3}	NA	NA	NA	NA	NA
Vinyl Chloride	ug/m3	ND(13){2.6}	ND(2.4){0.48}	NA	NA	NA	NA	NA
Xylenes (total)	ug/m3	NA	NA	NA	NA	NA	NA	NA
Semivolatile Organics								
1,2,4-Trichlorobenzene	ug/m3	ND(74){19}	ND(27){3.9}	ND(6.2){0.38}	ND(6.5){0.53}	ND(6){0.49}	ND(6.2){0.39}	ND(5.9){0.29}
1,2-Dichlorobenzene	ug/m3	8.2 J	ND(5.6){1.1}	NA	NA	NA	NA	NA
1,3-Dichlorobenzene	ug/m3	7.6 J	ND(5.6){0.89}	NA	NA	NA	NA	NA
1,4-Dichlorobenzene	ug/m3	9.7 J	ND(5.6){1.1}	ND(1){0.2}	ND(1){0.18}	ND(0.97){0.17}	ND(1){0.22}	ND(0.96){0.16}
Benzyl Chloride	ug/m3	ND(26){13}	ND(4.8){0.67}	NA	NA	NA	NA	NA
Hexachlorobutadiene	ug/m3	ND(110){21}	ND(39){6.8}	ND(8.9){0.33}	ND(9.3){0.6}	ND(8.6){0.56}	ND(8.9){0.53}	ND(8.5){1.4}
Hexachloroethane	ug/m3	ND(48){9.7}	NA	NA	NA	NA	NA	NA
Naphthalene	ug/m3	38 J	1.1 J	0.68 J	0.27 J	0.77 J	ND(4.4){0.14}	ND(4.2){0.2}
Tetrahydrofuran	ug/m3	ND(15){2.9}	ND(2.7){0.47}	NA	NA	NA	NA	NA

Table 6
Cumulative Summary of Indoor Air Data for Building 59

Indoor Air Investigation and Assessment Summary Report for Building 59 – Summer 2017

Groundwater Management Area 3

General Electric Company - Pittsfield, Massachusetts

(Results are presented in ug/m3)

Location ID: Date Collected: Sample Name:	VISL 2017 Indoor Air_THQ = 0.1	Units	Facility Area 09/28/06 Summa Canister #0110	Facility Area 10/11/07 59-IA-1	Facility Area 10/29/08 59-IA-1	Facility Area 10/20/09 59-IA-1	Facility Area 11/18/10 59-IA-01	Facility Area 10/20/11 59-IA-1	Facility Area 10/25/12 59-IA-1
Volatile Organics									
1,1,1,2-Tetrachloroethane	1.7	ug/m3	ND(6.9){1.4}	ND(6.9){1.4}	ND(6.9){1.4}	ND(6.9){1.4}	ND(6.9){1.4}	NA	ND(6.9){1.4}
1,1,1-Trichloroethane	2,200	ug/m3	ND(5.5){1.1}	ND(5.5){1.1}	ND(5.5){1.1}	ND(5.5){1.1}	ND(5.5){1.1}	ND(1.1){0.19}	ND(5.5){1.1}
1,1,2,2-Tetrachloroethane	0.21	ug/m3	ND(6.9){1.4}	ND(6.9){1.4}	ND(6.9){1.4}	ND(6.9 J){1.4}	ND(6.9){1.4}	ND(1.4){0.27}	ND(6.9){1.4}
1,1,2-trichloro-1,2,2-trifluoroethane	2,200	ug/m3	ND(7.7){3.8}	ND(7.7){3.8}	ND(15){3.8}	ND(15){3.8}	ND(15){3.8}	0.56 J	ND(15){3.8}
1,1,2-Trichloroethane	0.088	ug/m3	ND(5.5){1.1}	ND(5.5){1.1}	ND(5.5){1.1}	ND(5.5){1.1}	ND(5.5){1.1}	ND(1.1){0.1}	ND(5.5){1.1}
1,1-Dichloroethane	7.7	ug/m3	ND(4){0.81}	ND(4){0.81}	ND(4){0.81}	ND(4){0.81}	ND(4){0.81}	ND(0.81){0.14}	ND(4){0.81}
1,1-Dichloroethene	88	ug/m3	ND(4){0.79}	ND(4){0.79}	ND(4){0.79}	ND(4){0.79}	ND(4){0.79}	ND(0.79){0.12}	ND(4){0.79}
1,2,3-Trichloropropane	0.13	ug/m3	ND(6){1.2}	ND(6){1.2}	ND(6){1.2}	ND(6){1.2}	ND(6){1.2}	NA	ND(6){1.2}
1,2,4-Trimethylbenzene	26	ug/m3	ND(4.9){0.98}	1.4 J	ND(4.9){0.98}	ND(4.9){0.98}	ND(4.9){0.98}	ND(0.98){0.26}	ND(4.9){0.98}
1,2-Dibromo-3-chloropropane	0.002	ug/m3	NA	NA	NA	NA	NA	NA	ND(97){97}
1,2-Dibromoethane	0.02	ug/m3	ND(7.7){1.5}	ND(7.7){1.5}	ND(7.7){1.5}	ND(7.7){1.5}	ND(7.7){1.5}	ND(1.5){0.14}	ND(7.7){1.5}
1,2-Dichloro-1,1,2,2-tetrafluoroethane	--	ug/m3	ND(7){1.4}	ND(7){1.4}	ND(7){1.4}	ND(7){1.4}	ND(7){1.4}	ND(1.4){0.22}	ND(7){1.4}
1,2-Dichloroethane	0.47	ug/m3	ND(4){0.81}	ND(4){0.81}	ND(4){0.81}	ND(4){0.81}	ND(4){0.81}	ND(0.81){0.13}	ND(4){0.81}
1,2-Dichloroethene (total)	--	ug/m3	NA	NA	NA	NA	NA	ND(0.79){0.056}	NA
1,2-Dichloropropane	1.8	ug/m3	ND(4.6){0.92}	ND(4.6){0.92}	ND(4.6){0.92}	ND(4.6){0.92}	ND(4.6){0.92}	ND(0.92){0.065}	ND(4.6){0.92}
1,3,5-Trimethylbenzene	--	ug/m3	ND(4.9){0.98}	ND(4.9){0.98}	ND(4.9){0.98}	ND(4.9){0.98}	ND(4.9){0.98}	ND(0.98){0.25}	ND(4.9){0.98}
1,3-Butadiene	0.41	ug/m3	ND(4.4){1.1}	ND(4.4){1.1}	ND(4.4){1.1}	ND(4.4){1.1}	ND(4.4){1.1}	ND(0.44){0.022}	ND(4.4){0.88}
1,4-Dioxane	2.5	ug/m3	ND(3.6){0.72}	ND(3.6){0.72}	ND(3.6){0.72}	ND(3.6 J){0.72}	ND(3.6){0.72}	ND(18){0.32}	ND(3.6){1.8}
2-Butanone	2,200	ug/m3	1.8 J	2.1 J	14	ND(5.9){1.5}	ND(5.9){1.5}	1.3 J	2.7 J
2-Chlorotoluene	--	ug/m3	NA	NA	NA	NA	NA	ND(1){0.24}	NA
2-Hexanone	13	ug/m3	ND(8.2){2}	ND(8.2){2}	3.5 J	ND(8.2){2}	ND(8.2){2}	ND(2){0.16}	ND(8.2){2}
3-Chloropropene	0.44	ug/m3	ND(3.1){0.63}	ND(3.1){1.6}	ND(3.1){0.63}	ND(3.1){0.63}	ND(3.1){0.63}	ND(1.6){0.059}	ND(3.1){0.63}
4-Ethyltoluene	--	ug/m3	1.1 J	ND(4.9){0.98}	ND(4.9){0.98}	ND(4.9){0.98}	ND(4.9){0.98}	ND(0.98){0.23}	ND(4.9){0.98}
4-Methyl-2-pentanone	1,300	ug/m3	ND(8.2){2}	ND(8.2){2}	ND(8.2){2}	ND(8.2){2}	ND(8.2){2}	0.18 J	ND(8.2){2}
Acetone	14,000	ug/m3	26	15	48	9.4	6.9	67	18
Acetonitrile	26	ug/m3	ND(3.4){0.84}	ND(3.4 J){0.84}	ND(3.4){0.84}	ND(3.4){0.84}	ND(3.4){0.84}	NA	0.99 J
Acrolein	0.0088	ug/m3	ND(4.6){1.1}	ND(4.6){1.1}	3.3 J	ND(4.6 J){1.1}	ND(4.6){1.1}	NA	ND(4.6){1.1}
Acrylonitrile	0.18	ug/m3	ND(4.3){1.1}	ND(4.3){1.1}	ND(4.3){1.1}	ND(4.3){1.1}	ND(4.3){1.1}	NA	ND(4.3){1.1}
Alpha Methyl Styrene	--	ug/m3	ND(4.8){0.97}	ND(4.8 J){0.97}	ND(4.8){0.97}	ND(4.8){0.97}	ND(4.8){0.97}	NA	ND(4.8){0.97}
alpha-Pinene	--	ug/m3	NA	NA	NA	NA	NA	NA	ND(0){0}
Benzene	1.6	ug/m3	ND(3.2){0.64}	ND(3.2){0.64}	ND(3.2){0.64}	0.65 J	ND(3.2){0.64}	0.33 J	0.67 J
Bromobenzene	26	ug/m3	ND(6.4){1.3}	ND(6.4){1.3}	ND(6.4){1.3}	ND(6.4){1.3}	ND(6.4){1.3}	NA	ND(6.4){1.3}
Bromodichloromethane	0.33	ug/m3	ND(6.7){1.3}	ND(6.7){1.3}	ND(6.7){1.3}	ND(6.7){1.3}	ND(6.7){1.3}	ND(1.3){0.19}	ND(6.7){1.3}
Bromoethene	0.38	ug/m3	NA	NA	NA	NA	NA	ND(0.87){0.083}	NA
Bromoform	11	ug/m3	ND(10){2.1}	ND(10){2.1}	ND(10){2.1}	ND(10){2.1}	ND(10){2.1}	ND(2.1){0.2}	ND(10){2.1}
Bromomethane	2.2	ug/m3	ND(3.9){0.78}	ND(3.9){0.78}	ND(3.9){0.78}	ND(3.9){0.78}	ND(3.9){0.78}	ND(0.78){0.047}	ND(3.9){0.78}
Carbon Disulfide	310	ug/m3	ND(3.1){0.62}	ND(3.1){0.62}	ND(3.1){0.62}	ND(3.1){0.62}	ND(3.1){0.62}	0.82 J	ND(3.1){1.6}
Carbon Tetrachloride	2	ug/m3	ND(6.3){1.3}	ND(6.3){1.3}	ND(6.3){1.3}	ND(6.3){1.3}	ND(6.3){1.3}	0.52 J	ND(6.3){1.3}
Chlorobenzene	22	ug/m3	ND(4.6){0.92}	ND(4.6){0.92}	ND(4.6){0.92}	ND(4.6){0.92}	ND(4.6){0.92}	ND(0.92){0.092}	ND(4.6){0.92}

Table 6
Cumulative Summary of Indoor Air Data for Building 59

Indoor Air Investigation and Assessment Summary Report for Building 59 – Summer 2017

Groundwater Management Area 3

General Electric Company - Pittsfield, Massachusetts

(Results are presented in ug/m3)

Location ID: Date Collected: Sample Name:	VISL 2017 Indoor Air_THQ = 0.1	Units	Facility Area 09/28/06 Summa Canister #0110	Facility Area 10/11/07 59-IA-1	Facility Area 10/29/08 59-IA-1	Facility Area 10/20/09 59-IA-1	Facility Area 11/18/10 59-IA-01	Facility Area 10/20/11 59-IA-1	Facility Area 10/25/12 59-IA-1
Volatile Organics									
Chlorodifluoromethane	22,000	ug/m3	2 J	ND(3.5){0.71}	ND(3.5){0.71}	ND(3.5){0.71}	0.82 J	0.9 J	1 J
Chloroethane	4,400	ug/m3	ND(2.6){0.53}	ND(2.6){0.53}	ND(2.6){0.53}	ND(2.6){0.53}	ND(2.6){0.53}	ND(1.3){0.042}	ND(2.6){0.53}
Chloroform	0.53	ug/m3	ND(4.9){0.98}	ND(4.9){0.98}	ND(4.9){0.98}	ND(4.9){0.98}	ND(4.9){0.98}	0.15 J	ND(4.9){0.98}
Chloromethane	39	ug/m3	0.78 J	1.1 J	0.8 J	1.3 J	1.2 J	1.1	1.2 J
cis-1,2-Dichloroethene	--	ug/m3	ND(4){0.79}	ND(4){0.79}	ND(4){0.79}	ND(4){0.79}	ND(4){0.79}	ND(0.79){0.056}	ND(4){0.79}
cis-1,3-Dichloropropene	--	ug/m3	ND(4.5){0.91}	ND(4.5){0.91}	ND(4.5){0.91}	ND(4.5){0.91}	ND(4.5){0.91}	ND(0.91){0.073}	ND(4.5){0.91}
Cyclohexane	2,600	ug/m3	NA	NA	NA	NA	NA	0.45 J	ND(3.4){0.69}
Dibromochloromethane	--	ug/m3	ND(8.5){1.7}	ND(8.5){1.7}	ND(8.5){1.7}	ND(8.5){1.7}	ND(8.5){1.7}	ND(1.7){0.18}	ND(8.5){1.7}
Dibromomethane	1.8	ug/m3	ND(7.1){1.4}	ND(7.1){1.4}	ND(7.1){1.4}	ND(7.1){1.4}	ND(7.1){1.4}	NA	ND(7.1){1.4}
Dichlorodifluoromethane	44	ug/m3	1.9 J	2.3 J	2.2 J	1.9 J	2.6 J	2.2 J	2.2 J
Dichlorofluoromethane	--	ug/m3	ND(4.2){0.84}	ND(4.2){0.84}	ND(4.2){0.84}	ND(4.2){0.84}	ND(4.2){0.84}	NA	ND(4.2){0.84}
d-Limonene	--	ug/m3	NA	NA	NA	NA	NA	NA	ND(0){0}
Ethanol	--	ug/m3	NA	NA	NA	NA	NA	NA	6.7
Ethyl acetate	31	ug/m3	ND(3.6){0.72}	ND(3.6){0.72}	ND(3.6){0.72}	ND(3.6){0.72}	ND(3.6){0.72}	NA	ND(3.6){1.8}
Ethyl Acrylate	3.5	ug/m3	ND(4.1){0.82}	ND(4.1){0.82}	ND(4.1){0.82}	ND(4.1){0.82}	ND(4.1){0.82}	NA	ND(4.1){0.82}
Ethyl Methacrylate	130	ug/m3	ND(4.7){0.93}	ND(4.7){0.93}	ND(4.7){0.93}	ND(4.7){0.93}	ND(4.7){0.93}	NA	ND(4.7){0.93}
Ethylbenzene	4.9	ug/m3	ND(4.3){0.87}	ND(4.3){0.87}	1.1 J	ND(4.3){0.87}	ND(4.3){0.87}	0.22 J	ND(4.3){0.87}
Heptane	180	ug/m3	1.2 J	1.8 J	ND(4.1){0.82}	ND(4.1){0.82}	ND(4.1){0.82}	0.52 J	ND(4.1){0.82}
Iodomethane	--	ug/m3	ND(5.8){1.2}	ND(5.8){1.2}	ND(5.8){1.2}	ND(5.8){1.2}	ND(5.8){1.2}	NA	ND(5.8){1.2}
Isocotane	--	ug/m3	0.98 J	ND(4.7){0.93}	ND(4.7){0.93}	ND(4.7){0.93}	ND(4.7){0.93}	0.28 J	ND(4.7){0.93}
Isopropyl alcohol	88	ug/m3	NA	NA	NA	NA	NA	1.3 J	ND(2.5){1.2}
Isopropylbenzene	180	ug/m3	ND(4.9){0.98}	ND(4.9){0.98}	ND(4.9){0.98}	ND(4.9){0.98}	ND(4.9){0.98}	ND(0.98){0.15}	ND(4.9){0.98}
m&p-Xylene	--	ug/m3	3.9 J	1.3 J	2.1 J	ND(4.3){0.87}	1 J	NA	1.5 J
Methyl Acrylate	8.8	ug/m3	ND(3.5){0.7}	ND(3.5){0.7}	ND(3.5){0.7}	ND(3.5){0.7}	ND(3.5){0.7}	NA	ND(3.5){0.7}
Methyl Methacrylate	310	ug/m3	ND(4.1){0.82}	ND(4.1){0.82}	ND(4.1){0.82}	ND(4.1){0.82}	ND(4.1){0.82}	ND(2){0.053}	ND(4.1){0.82}
Methyl tert-butyl ether	47	ug/m3	ND(3.6){0.72}	ND(3.6){0.72}	ND(3.6){0.72}	ND(3.6){0.72}	ND(3.6){0.72}	ND(0.72){0.058}	ND(3.6){0.72}
Methylene Chloride	260	ug/m3	3.1 J	8.6	ND(3.5){0.69}	0.8 J	ND(3.5){0.69}	0.95 J	1 J
n-Butane	--	ug/m3	NA	NA	NA	NA	NA	2.1	NA
n-Butyl Acetate	--	ug/m3	NA	NA	NA	NA	NA	NA	ND(0){0}
n-Butylbenzene	--	ug/m3	NA	NA	NA	NA	NA	ND(1.1){0.3}	NA
n-Hexane	310	ug/m3	91	3.5 J	0.92 J	1.5 J	2 J	12	2.1 J
n-Octane	--	ug/m3	ND(4.7){0.93}	ND(4.7){0.93}	ND(4.7){0.93}	ND(4.7){0.93}	ND(4.7){0.93}	NA	ND(4.7){0.93}
Nonane	8.8	ug/m3	NA	NA	NA	NA	NA	NA	ND(0){0}
n-Propylbenzene	440	ug/m3	NA	NA	NA	NA	NA	ND(0.98){0.25}	ND(4.9){0.98}
o-Xylene	44	ug/m3	1.5 J	ND(4.3){0.87}	ND(4.3){0.87}	ND(4.3){0.87}	ND(4.3){0.87}	NA	ND(4.3){0.87}
Pentane	440	ug/m3	1.7 J	0.86 J	0.86 J	0.75 J	0.83 J	NA	30
p-Isopropyltoluene	--	ug/m3	NA	NA	NA	NA	NA	ND(1.1){0.26}	NA
Propene	1,300	ug/m3	ND(1.7){0.34}	1.2 J	1.5 J	1.1 J	0.7 J	NA	ND(1.7){0.34}
sec-Butylbenzene	--	ug/m3	NA	NA	NA	NA	NA	ND(1.1){0.26}	NA
Styrene	440	ug/m3	ND(4.3){0.85}	ND(4.3){0.85}	ND(4.3){0.85}	ND(4.3){0.85}	ND(4.3){0.85}	ND(0.85){0.13}	ND(4.3){0.85}

Table 6
Cumulative Summary of Indoor Air Data for Building 59

Indoor Air Investigation and Assessment Summary Report for Building 59 – Summer 2017

Groundwater Management Area 3

General Electric Company - Pittsfield, Massachusetts

(Results are presented in ug/m3)

Location ID: Date Collected: Sample Name:	VISL 2017 Indoor Air_THQ = 0.1	Units	Facility Area 09/28/06 Summa Canister #0110	Facility Area 10/11/07 59-IA-1	Facility Area 10/29/08 59-IA-1	Facility Area 10/20/09 59-IA-1	Facility Area 11/18/10 59-IA-01	Facility Area 10/20/11 59-IA-1	Facility Area 10/25/12 59-IA-1
Volatile Organics									
tert-Butylbenzene	--	ug/m3	NA	NA	NA	NA	NA	ND(1.1){0.26}	NA
Tertiary butyl alcohol	--	ug/m3	ND(3){0.61}	1.1 J	ND(3){0.61}	ND(3){0.61}	ND(3){0.61}	ND(15){0.22}	ND(3){1.5}
Tetrachloroethene	18	ug/m3	ND(6.8){1.4}	ND(6.8){1.4}	1.5 J	ND(6.8){1.4}	ND(6.8){1.4}	0.11 J	1.9 J
Toluene	2,200	ug/m3	3.1 J	15	2.2 J	1.3 J	1.2 J	0.89	1.8 J
trans-1,2-Dichloroethene	--	ug/m3	ND(4){0.79}	ND(4){0.79}	ND(4){0.79}	ND(4){0.79}	ND(4){0.79}	ND(0.79){0.13}	ND(4){0.79}
trans-1,3-Dichloropropene	--	ug/m3	ND(4.5){0.91}	ND(4.5){0.91}	ND(4.5){0.91}	ND(4.5){0.91}	ND(4.5){0.91}	ND(0.91){0.091}	ND(4.5){0.91}
Trichloroethene	0.88	ug/m3	5.7	ND(5.4){1.1}	3.8 J	1.6 J	ND(5.4){1.1}	0.99 J	3.4 J
Trichlorofluoromethane	--	ug/m3	31	2.9 J	4.5 J	3.3 J	2.4 J	3.9	7.2
Vinyl Acetate	88	ug/m3	ND(3.5){0.7}	ND(3.5){0.7}	ND(3.5){0.7}	ND(3.5){0.7}	ND(3.5){1.8}	NA	ND(3.5){1.8}
Vinyl Chloride	2.8	ug/m3	ND(2.6){0.51}	ND(2.6){0.51}	ND(2.6){0.51}	ND(2.6){0.51}	ND(2.6){0.51}	ND(0.51){0.074}	ND(2.6){0.51}
Xylenes (total)	44	ug/m3	NA	NA	NA	NA	NA	0.74 J	NA
Semivolatile Organics									
1,2,4-Trichlorobenzene	0.88	ug/m3	ND(15){3.7}	ND(15){3.7}	ND(15){3.7}	ND(15){3.7}	ND(15){3.7}	ND(3.7 J){0.37}	ND(15){3.7}
1,2-Dichlorobenzene	88	ug/m3	ND(6){1.2}	ND(6){1.8}	ND(6){1.2}	ND(6){1.2}	ND(6){1.2}	ND(1.2){0.29}	ND(6){1.2}
1,3-Dichlorobenzene	--	ug/m3	ND(6){1.2}	ND(6){1.8}	ND(6){1.2}	ND(6){1.2}	ND(6){1.2}	ND(1.2){0.26}	ND(6){1.2}
1,4-Dichlorobenzene	1.1	ug/m3	ND(6){1.2}	ND(6){1.8}	ND(6){1.2}	ND(6){1.2}	ND(6){1.2}	ND(1.2){0.26}	ND(6){1.2}
Benzyl Chloride	0.25	ug/m3	NA	NA	NA	NA	NA	ND(1){0.24}	ND(5.2){2.6}
Hexachlorobutadiene	0.56	ug/m3	ND(21){5.3}	ND(21){5.3}	ND(21){5.3}	ND(21){5.3}	ND(21){5.3}	ND(2.1){0.69}	ND(21){4.3}
Hexachloroethane	1.1	ug/m3	ND(9.7){1.9}	ND(9.7){1.9}	ND(9.7){1.9}	ND(9.7){1.9}	ND(9.7){1.9}	NA	ND(9.7){1.9}
Naphthalene	0.36	ug/m3	ND(5.2){2.1}	ND(5.2){2.1}	ND(5.2){2.1}	ND(5.2){2.1}	ND(5.2){2.1}	ND(2.6 J){0.45}	ND(10){2.1}
Tetrahydrofuran	880	ug/m3	NA	NA	NA	NA	NA	ND(15){0.053}	ND(2.9){0.59}

Table 6
Cumulative Summary of Indoor Air Data for Building 59

Indoor Air Investigation and Assessment Summary Report for Building 59 – Summer 2017

Groundwater Management Area 3

General Electric Company - Pittsfield, Massachusetts

(Results are presented in ug/m3)

Location ID: Date Collected: Sample Name:	VISL 2017 Indoor Air_THQ = 0.1	Units	Facility Area 03/12/14 59-IA-1	Facility Area 03/31/15 59-IA-1	Facility Area 03/16/16 59-IA-1	Facility Area 08/24/16 59-IA-1	Facility Area 03/17/17 59-IA-1	Facility Area 09/01/17 59-IA-1	Library Area 09/28/06 Summa Canister #0174
Volatile Organics									
1,1,1,2-Tetrachloroethane	1.7	ug/m3	NA	NA	NA	NA	NA	NA	ND(6.9){1.4}
1,1,1-Trichloroethane	2,200	ug/m3	ND(5){1.1}	NA	NA	NA	NA	NA	1.5 J
1,1,2,2-Tetrachloroethane	0.21	ug/m3	ND(6.3){1.2}	ND(1.2){0.14}	ND(1.2){0.16}	ND(1.1){0.15}	ND(1.1){0.26}	ND(1.1){0.24}	ND(6.9){1.4}
1,1,2-trichloro-1,2,2-trifluoroethane	2,200	ug/m3	ND(7){2.4}	NA	NA	NA	NA	NA	ND(7.7){3.8}
1,1,2-Trichloroethane	0.088	ug/m3	ND(5){1.4}	NA	NA	NA	NA	NA	ND(5.5){1.1}
1,1-Dichloroethane	7.7	ug/m3	ND(3.7){0.83}	NA	NA	NA	NA	NA	ND(4){0.81}
1,1-Dichloroethene	88	ug/m3	ND(3.6){0.93}	NA	NA	NA	NA	NA	ND(4){0.79}
1,2,3-Trichloropropane	0.13	ug/m3	NA	ND(5.3){5.3}	ND(5.1){1}	ND(4.8){0.96}	ND(5){0.39}	ND(5){1.2}	ND(6){1.2}
1,2,4-Trimethylbenzene	26	ug/m3	ND(4.5){1}	ND(0.86){0.076}	0.26 J	0.2 J	0.22 J	0.22 J	1.9 J
1,2-Dibromo-3-chloropropane	0.002	ug/m3	ND(36){36}	NA	NA	NA	NA	NA	NA
1,2-Dibromoethane	0.02	ug/m3	ND(7.1){1.6}	NA	NA	NA	NA	NA	ND(7.7){1.5}
1,2-Dichloro-1,1,2,2-tetrafluoroethane	--	ug/m3	ND(6.4){2.2}	NA	NA	NA	NA	NA	ND(7){1.4}
1,2-Dichloroethane	0.47	ug/m3	ND(3.7){1.2}	NA	NA	NA	NA	NA	ND(4){0.81}
1,2-Dichloroethene (total)	--	ug/m3	NA	NA	NA	NA	NA	NA	NA
1,2-Dichloropropane	1.8	ug/m3	ND(4.2){1.8}	NA	NA	NA	NA	NA	ND(4.6){0.92}
1,3,5-Trimethylbenzene	--	ug/m3	ND(4.5){0.7}	NA	NA	NA	NA	NA	ND(4.9){0.98}
1,3-Butadiene	0.41	ug/m3	ND(2){0.4}	NA	NA	NA	NA	NA	ND(4.4){1.1}
1,4-Dioxane	2.5	ug/m3	ND(13){2.4}	NA	NA	NA	NA	NA	ND(3.6){0.72}
2-Butanone	2,200	ug/m3	ND(11){1.2}	NA	NA	NA	NA	NA	4.8 J
2-Chlorotoluene	--	ug/m3	NA	NA	NA	NA	NA	NA	NA
2-Hexanone	13	ug/m3	ND(15){1.8}	NA	NA	NA	NA	NA	ND(8.2){2}
3-Chloropropene	0.44	ug/m3	ND(12){1.4}	NA	NA	NA	NA	NA	ND(3.1){0.63}
4-Ethyltoluene	--	ug/m3	ND(4.5){0.95}	NA	NA	NA	NA	NA	2 J
4-Methyl-2-pentanone	1,300	ug/m3	ND(3.8){0.68}	NA	NA	NA	NA	NA	ND(8.2){2}
Acetone	14,000	ug/m3	9.4 J	NA	NA	NA	NA	NA	100
Acetonitrile	26	ug/m3	ND(15){15}	ND(1.5){1.5}	ND(1.4){1.4}	ND(1.4){1.4}	ND(1.4){1.4}	ND(1.4){0}	ND(3.4){0.84}
Acrolein	0.0088	ug/m3	ND(84){84}	ND(2){2}	1.9 J	1.9	ND(2.2){2.2}	ND(1.9){0}	ND(4.6){1.1}
Acrylonitrile	0.18	ug/m3	ND(8){8}	NA	NA	NA	NA	NA	ND(4.3){1.1}
Alpha Methyl Styrene	--	ug/m3	NA	NA	NA	NA	NA	NA	ND(4.8){0.97}
alpha-Pinene	--	ug/m3	ND(51){51}	NA	NA	NA	NA	NA	NA
Benzene	1.6	ug/m3	1 J	ND(0.56){0.085}	0.66	0.27 J	ND(0.53){0.088}	0.2 J	4.6
Bromobenzene	26	ug/m3	NA	NA	NA	NA	NA	NA	ND(6.4){1.3}
Bromodichloromethane	0.33	ug/m3	ND(6.2){1.5}	NA	NA	NA	NA	NA	ND(6.7){1.3}
Bromoethene	0.38	ug/m3	NA	NA	NA	NA	NA	NA	NA
Bromoform	11	ug/m3	ND(9.5){2}	NA	NA	NA	NA	NA	ND(10){2.1}
Bromomethane	2.2	ug/m3	ND(36){2.3}	ND(3.4){0.33}	ND(3.3){0.55}	ND(3.1){0.53}	ND(3.2){0.44}	ND(3.2){0.6}	ND(3.9){0.78}
Carbon Disulfide	310	ug/m3	ND(11){0.58}	ND(2.7){1.1}	ND(2.6){0.72}	ND(2.5){0.68}	ND(2.6){0.44}	ND(2.6){0.29}	ND(3.1){0.62}
Carbon Tetrachloride	2	ug/m3	ND(5.8){1.2}	NA	NA	NA	NA	NA	ND(6.3){1.3}
Chlorobenzene	22	ug/m3	ND(4.2){0.66}	NA	NA	NA	NA	NA	ND(4.6){0.92}

Table 6
Cumulative Summary of Indoor Air Data for Building 59

Indoor Air Investigation and Assessment Summary Report for Building 59 – Summer 2017

Groundwater Management Area 3
General Electric Company - Pittsfield, Massachusetts
(Results are presented in ug/m3)

Location ID: Date Collected: Sample Name:	VISL 2017 Indoor Air_THQ = 0.1	Units	Facility Area 03/12/14 59-IA-1	Facility Area 03/31/15 59-IA-1	Facility Area 03/16/16 59-IA-1	Facility Area 08/24/16 59-IA-1	Facility Area 03/17/17 59-IA-1	Facility Area 09/01/17 59-IA-1	Library Area 09/28/06 Summa Canister #0174
Volatile Organics									
Chlorodifluoromethane	22,000	ug/m3	NA	NA	NA	NA	NA	NA	6
Chloroethane	4,400	ug/m3	ND(9.7){1}	NA	NA	NA	NA	NA	ND(2.6){0.53}
Chloroform	0.53	ug/m3	ND(4.5){1}	ND(0.86){0.15}	ND(0.82){0.33}	0.5 J	0.25 J	ND(0.82){0.19}	1.2 J
Chloromethane	39	ug/m3	ND(19){1.2}	NA	NA	NA	NA	NA	1.2 J
cis-1,2-Dichloroethene	--	ug/m3	ND(3.6){0.7}	NA	NA	NA	NA	NA	ND(4){0.79}
cis-1,3-Dichloropropene	--	ug/m3	ND(4.2){0.73}	NA	NA	NA	NA	NA	ND(4.5){0.91}
Cyclohexane	2,600	ug/m3	ND(3.2){0.88}	NA	NA	NA	NA	NA	NA
Dibromochloromethane	--	ug/m3	ND(7.8){1.8}	NA	NA	NA	NA	NA	ND(8.5){1.7}
Dibromomethane	1.8	ug/m3	NA	NA	NA	NA	NA	NA	ND(7.1){1.4}
Dichlorodifluoromethane	44	ug/m3	2.8 J	NA	NA	NA	NA	NA	3.2 J
Dichlorofluoromethane	--	ug/m3	NA	NA	NA	NA	NA	NA	ND(4.2){0.84}
d-Limonene	--	ug/m3	ND(20){20}	NA	NA	NA	NA	NA	NA
Ethanol	--	ug/m3	10	NA	NA	NA	NA	NA	NA
Ethyl acetate	31	ug/m3	ND(13){13}	ND(3.2){3.2}	7.5	ND(2.9){2.9}	ND(3){3}	ND(3){1}	ND(3.6){0.72}
Ethyl Acrylate	3.5	ug/m3	NA	NA	NA	NA	NA	NA	ND(4.1){0.82}
Ethyl Methacrylate	130	ug/m3	NA	NA	NA	NA	NA	NA	ND(4.7){0.93}
Ethylbenzene	4.9	ug/m3	ND(4){1.1}	ND(0.76){0.083}	0.77	0.2 J	0.22 J	ND(0.72){0.13}	8.3
Heptane	180	ug/m3	ND(3.8){1.2}	NA	NA	NA	NA	NA	3 J
Iodomethane	--	ug/m3	NA	NA	NA	NA	NA	NA	ND(5.8){1.2}
Isooctane	--	ug/m3	ND(4.3){0.33}	NA	NA	NA	NA	NA	2.3 J
Isopropyl alcohol	88	ug/m3	1.6 J	NA	NA	NA	NA	NA	NA
Isopropylbenzene	180	ug/m3	ND(4.5){0.9}	NA	NA	NA	NA	NA	ND(4.9){0.98}
m&p-Xylene	--	ug/m3	0.82 J	ND(0.76){0.15}	1.7	0.41 J	0.57 J	ND(0.72){0.22}	20
Methyl Acrylate	8.8	ug/m3	NA	NA	NA	NA	NA	NA	ND(3.5){0.7}
Methyl Methacrylate	310	ug/m3	ND(38){38}	NA	NA	NA	NA	NA	ND(4.1){0.82}
Methyl tert-butyl ether	47	ug/m3	ND(3.3){0.45}	ND(0.63){0.076}	ND(0.6){0.16}	ND(0.58){0.15}	ND(0.59){0.12}	ND(0.6){0.19}	1.8 J
Methylene Chloride	260	ug/m3	ND(32){1.6}	NA	NA	NA	NA	NA	4.5
n-Butane	--	ug/m3	NA	NA	NA	NA	NA	NA	NA
n-Butyl Acetate	--	ug/m3	ND(44){44}	NA	NA	NA	NA	NA	NA
n-Butylbenzene	--	ug/m3	NA	NA	NA	NA	NA	NA	NA
n-Hexane	310	ug/m3	1.7 J	1.1	ND(1.1){0.32}	0.85 J	3.4	1	470
n-Octane	--	ug/m3	ND(17){17}	NA	NA	NA	NA	NA	2.3 J
Nonane	8.8	ug/m3	ND(19){19}	NA	NA	NA	NA	NA	NA
n-Propylbenzene	440	ug/m3	ND(4.5){0.68}	NA	NA	NA	NA	NA	NA
o-Xylene	44	ug/m3	ND(4){0.82}	ND(0.76){0.15}	0.65 J	0.21 J	ND(0.72){0.093}	ND(0.72){0.19}	11
Pentane	440	ug/m3	NA	NA	NA	NA	NA	NA	5.7
p-Isopropyltoluene	--	ug/m3	NA	NA	NA	NA	NA	NA	NA
Propene	1,300	ug/m3	ND(6.3){1.2}	NA	NA	NA	NA	NA	ND(1.7){0.34}
sec-Butylbenzene	--	ug/m3	NA	NA	NA	NA	NA	NA	NA
Styrene	440	ug/m3	ND(3.9){1}	NA	NA	NA	NA	NA	ND(4.3){0.85}

Table 6
Cumulative Summary of Indoor Air Data for Building 59

Indoor Air Investigation and Assessment Summary Report for Building 59 – Summer 2017

Groundwater Management Area 3

General Electric Company - Pittsfield, Massachusetts

(Results are presented in ug/m3)

Location ID: Date Collected: Sample Name:	VISL 2017 Indoor Air_THQ = 0.1	Units	Facility Area 03/12/14 59-IA-1	Facility Area 03/31/15 59-IA-1	Facility Area 03/16/16 59-IA-1	Facility Area 08/24/16 59-IA-1	Facility Area 03/17/17 59-IA-1	Facility Area 09/01/17 59-IA-1	Library Area 09/28/06 Summa Canister #0174
Volatile Organics									
tert-Butylbenzene	--	ug/m3	NA	NA	NA	NA	NA	NA	NA
Tertiary butyl alcohol	--	ug/m3	NA	NA	NA	NA	NA	NA	ND(3){0.61}
Tetrachloroethene	18	ug/m3	ND(6.2){1.3}	ND(1.2){0.14}	0.44 J	ND(1.1){0.17}	ND(1.1){0.54}	ND(1.1){0.27}	ND(6.8){1.4}
Toluene	2,200	ug/m3	0.86 J	0.2 J	11	0.98	1.2	1.7	16
trans-1,2-Dichloroethene	--	ug/m3	ND(3.6){1}	NA	NA	NA	NA	NA	ND(4){0.79}
trans-1,3-Dichloropropene	--	ug/m3	ND(4.2){1}	NA	NA	NA	NA	NA	ND(4.5){0.91}
Trichloroethene	0.88	ug/m3	4.4 J	2	1.2	2.5	1.7	0.57 J	41
Trichlorofluoromethane	--	ug/m3	5.6	3.7	4.7	25	5.2	14	210
Vinyl Acetate	88	ug/m3	ND(13){3.3}	NA	NA	NA	NA	NA	ND(3.5){0.7}
Vinyl Chloride	2.8	ug/m3	ND(2.4){0.47}	NA	NA	NA	NA	NA	ND(2.6){0.51}
Xylenes (total)	44	ug/m3	NA	NA	NA	NA	NA	NA	NA
Semivolatile Organics									
1,2,4-Trichlorobenzene	0.88	ug/m3	ND(27){3.9}	ND(6.5){0.4}	ND(6.2){0.51}	ND(6){0.49}	ND(6.1){0.38}	0.76 J	ND(15){3.7}
1,2-Dichlorobenzene	88	ug/m3	ND(5.5){1.1}	NA	NA	NA	NA	NA	ND(6){1.2}
1,3-Dichlorobenzene	--	ug/m3	ND(5.5){0.89}	NA	NA	NA	NA	NA	ND(6){1.2}
1,4-Dichlorobenzene	1.1	ug/m3	ND(5.5){1.1}	ND(1){0.21}	ND(1){0.18}	ND(0.97){0.17}	ND(0.99){0.21}	ND(1){0.17}	ND(6){1.2}
Benzyl Chloride	0.25	ug/m3	ND(4.8){0.67}	NA	NA	NA	NA	NA	NA
Hexachlorobutadiene	0.56	ug/m3	ND(39){6.8}	ND(9.4){0.34}	ND(9){0.58}	ND(8.6){0.56}	ND(8.8){0.52}	ND(8.9){1.4}	ND(21){5.3}
Hexachloroethane	1.1	ug/m3	NA	NA	NA	NA	NA	NA	ND(9.7){1.9}
Naphthalene	0.36	ug/m3	ND(19){0.39}	ND(4.6){0.11}	0.6 J	0.38 J	ND(4.3){0.14}	ND(4.4){0.21}	ND(5.2){2.1}
Tetrahydrofuran	880	ug/m3	ND(2.7){0.46}	NA	NA	NA	NA	NA	NA

Table 6
Cumulative Summary of Indoor Air Data for Building 59

Indoor Air Investigation and Assessment Summary Report for Building 59 – Summer 2017

Groundwater Management Area 3

General Electric Company - Pittsfield, Massachusetts

(Results are presented in ug/m3)

Location ID: Date Collected: Sample Name:	VISL 2017 Indoor Air_THQ = 0.1	Units	Library Area 10/11/07 59-IA-2	Library Area 10/29/08 59-IA-2	Library Area 10/20/09 59-IA-2	Library Area 11/18/10 59-IA-02	Library Area 10/20/11 59-IA-2	Library Area 10/25/12 59-IA-2	Library Area 03/12/14 59-IA-2	Library Area 03/31/15 59-IA-2
Volatile Organics										
1,1,1,2-Tetrachloroethane	1.7	ug/m3	ND(6.9){1.4}	ND(6.9){1.4}	ND(6.9){1.4}	ND(6.9){1.4}	NA	ND(6.9){1.4}	NA	NA
1,1,1-Trichloroethane	2,200	ug/m3	ND(5.5){1.1}	ND(5.5){1.1}	ND(5.5){1.1}	ND(5.5){1.1}	ND(1.1){0.19}	ND(5.5){1.1}	ND(4.8){1}	NA
1,1,2,2-Tetrachloroethane	0.21	ug/m3	ND(6.9){1.4}	ND(6.9){1.4}	ND(6.9){1.4}	ND(6.9){1.4}	ND(1.4){0.27}	1.5 J	ND(6.1){1.2}	ND(1.2){0.15}
1,1,2-trichloro-1,2,2-trifluoroethane	2,200	ug/m3	ND(7.7){3.8}	ND(15){3.8}	ND(15){3.8}	ND(15){3.8}	0.56 J	ND(15){3.8}	ND(6.8){2.3}	NA
1,1,2-Trichloroethane	0.088	ug/m3	ND(5.5){1.1}	ND(5.5){1.1}	ND(5.5 J){1.1}	ND(5.5){1.1}	ND(1.1){0.1}	ND(5.5){1.1}	ND(4.8){1.3}	NA
1,1-Dichloroethane	7.7	ug/m3	ND(4){0.81}	ND(4){0.81}	ND(4){0.81}	ND(4){0.81}	ND(0.81){0.14}	ND(4){0.81}	ND(3.6){0.8}	NA
1,1-Dichloroethene	88	ug/m3	ND(4){0.79}	ND(4){0.79}	ND(4){0.79}	ND(4){0.79}	ND(0.79){0.12}	ND(4){0.79}	ND(3.5){0.89}	NA
1,2,3-Trichloropropane	0.13	ug/m3	ND(6){1.2}	ND(6){1.2}	ND(6){1.2}	ND(6){1.2}	NA	1.3 J	NA	ND(5.4){5.4}
1,2,4-Trimethylbenzene	26	ug/m3	1.8 J	ND(4.9){0.98}	ND(4.9){0.98}	ND(4.9){0.98}	ND(0.98){0.26}	4.4 J	ND(4.4){1}	0.095 J
1,2-Dibromo-3-chloropropane	0.002	ug/m3	NA	NA	NA	NA	NA	ND(97){97}	ND(34){34}	NA
1,2-Dibromoethane	0.02	ug/m3	ND(7.7){1.5}	ND(7.7){1.5}	ND(7.7){1.5}	ND(7.7){1.5}	ND(1.5){0.14}	ND(7.7){1.5}	ND(6.8){1.6}	NA
1,2-Dichloro-1,1,2,2-tetrafluoroethane	--	ug/m3	ND(7){1.4}	ND(7){1.4}	ND(7){1.4}	ND(7){1.4}	ND(1.4){0.22}	ND(7){1.4}	ND(6.2){2.1}	NA
1,2-Dichloroethane	0.47	ug/m3	ND(4){0.81}	ND(4){0.81}	ND(4){0.81}	ND(4){0.81}	ND(0.81){0.13}	ND(4){0.81}	ND(3.6){1.2}	NA
1,2-Dichloroethene (total)	--	ug/m3	NA	NA	NA	NA	ND(0.79){0.056}	NA	NA	NA
1,2-Dichloropropane	1.8	ug/m3	ND(4.6){0.92}	ND(4.6){0.92}	ND(4.6){0.92}	ND(4.6){0.92}	ND(0.92){0.065}	ND(4.6){0.92}	ND(4.1){1.7}	NA
1,3,5-Trimethylbenzene	--	ug/m3	ND(4.9){0.98}	ND(4.9){0.98}	ND(4.9){0.98}	ND(4.9){0.98}	ND(0.98){0.25}	2.6 J	ND(4.4){0.67}	NA
1,3-Butadiene	0.41	ug/m3	ND(4.4){1.1}	ND(4.4){1.1}	ND(4.4){1.1}	ND(4.4){1.1}	ND(0.44){0.022}	ND(4.4){0.88}	ND(2){0.38}	NA
1,4-Dioxane	2.5	ug/m3	ND(3.6){0.72}	ND(3.6){0.72}	ND(3.6 J){0.72}	ND(3.6){0.72}	ND(18){0.32}	ND(3.6){1.8}	ND(13){2.3}	NA
2-Butanone	2,200	ug/m3	3.1 J	1.5 J	ND(5.9){1.5}	3.1 J	0.7 J	3.5 J	1.4 J	NA
2-Chlorotoluene	--	ug/m3	NA	NA	NA	NA	ND(1){0.24}	NA	NA	NA
2-Hexanone	13	ug/m3	ND(8.2){2}	ND(8.2){2}	ND(8.2){2}	ND(8.2){2}	ND(2){0.16}	ND(8.2){2}	ND(14){1.7}	NA
3-Chloropropene	0.44	ug/m3	ND(3.1){1.6}	ND(3.1){0.63}	ND(3.1){0.63}	ND(3.1){0.63}	ND(1.6){0.059}	ND(3.1){0.63}	ND(11){1.4}	NA
4-Ethyltoluene	--	ug/m3	1.9 J	ND(4.9){0.98}	ND(4.9){0.98}	ND(4.9){0.98}	ND(0.98){0.23}	2.6 J	ND(4.4){0.91}	NA
4-Methyl-2-pentanone	1,300	ug/m3	ND(8.2){2}	ND(8.2){2}	ND(8.2){2}	ND(8.2){2}	ND(2){0.11}	ND(8.2){2}	ND(3.6){0.65}	NA
Acetone	14,000	ug/m3	30	14	41	20	7.5 J	22	14 J	NA
Acetonitrile	26	ug/m3	ND(3.4 J){0.84}	ND(3.4){0.84}	ND(3.4){0.84}	ND(3.4){0.84}	NA	0.85 J	ND(15){15}	ND(1.5){1.5}
Acrolein	0.0088	ug/m3	2.5 J	ND(4.6){1.1}	ND(4.6){1.1}	ND(4.6){1.1}	NA	1.6 J	ND(81){81}	ND(2.1){2.1}
Acrylonitrile	0.18	ug/m3	ND(4.3){1.1}	ND(4.3){1.1}	ND(4.3){1.1}	ND(4.3){1.1}	NA	ND(4.3){1.1}	ND(7.7){7.7}	NA
Alpha Methyl Styrene	--	ug/m3	ND(4.8 J){0.97}	ND(4.8){0.97}	ND(4.8){0.97}	ND(4.8){0.97}	NA	ND(4.8){0.97}	NA	NA
alpha-Pinene	--	ug/m3	NA	NA	NA	NA	NA	ND(0){0}	ND(49){49}	NA
Benzene	1.6	ug/m3	1.8 J	1.3 J	0.98 J	1.1 J	0.28 J	1.8 J	0.91 J	ND(0.58){0.086}
Bromobenzene	26	ug/m3	ND(6.4){1.3}	ND(6.4){1.3}	ND(6.4){1.3}	ND(6.4){1.3}	NA	1.9 J	NA	NA
Bromodichloromethane	0.33	ug/m3	ND(6.7){1.3}	ND(6.7){1.3}	ND(6.7){1.3}	ND(6.7){1.3}	ND(1.3){0.19}	ND(6.7){1.3}	ND(5.9){1.4}	NA
Bromoethene	0.38	ug/m3	NA	NA	NA	NA	ND(0.87){0.083}	NA	NA	NA
Bromoform	11	ug/m3	ND(10){2.1}	ND(10){2.1}	ND(10){2.1}	ND(10){2.1}	ND(2.1){0.2}	ND(10){2.1}	ND(9.1){1.9}	NA
Bromomethane	2.2	ug/m3	ND(3.9){0.78}	ND(3.9){0.78}	ND(3.9){0.78}	ND(3.9){0.78}	ND(0.78){0.047}	ND(3.9){0.78}	ND(34){2.2}	ND(3.5){0.33}
Carbon Disulfide	310	ug/m3	ND(3.1){0.62}	ND(3.1){0.62}	ND(3.1){0.62}	ND(3.1){0.62}	ND(1.6){0.21}	ND(3.1){1.6}	ND(11){0.56}	ND(2.8){1.1}
Carbon Tetrachloride	2	ug/m3	ND(6.3){1.3}	ND(6.3){1.3}	ND(6.3){1.3}	ND(6.3){1.3}	0.44 J	ND(6.3){1.3}	ND(5.6){1.2}	NA
Chlorobenzene	22	ug/m3	ND(4.6){0.92}	ND(4.6){0.92}	ND(4.6){0.92}	ND(4.6){0.92}	ND(0.92){0.092}	1.1 J	ND(4.1){0.64}	NA

Table 6
Cumulative Summary of Indoor Air Data for Building 59

Indoor Air Investigation and Assessment Summary Report for Building 59 – Summer 2017

Groundwater Management Area 3
General Electric Company - Pittsfield, Massachusetts
(Results are presented in ug/m3)

Location ID: Date Collected: Sample Name:	VISL 2017 Indoor Air_THQ = 0.1	Units	Library Area 10/11/07 59-IA-2	Library Area 10/29/08 59-IA-2	Library Area 10/20/09 59-IA-2	Library Area 11/18/10 59-IA-02	Library Area 10/20/11 59-IA-2	Library Area 10/25/12 59-IA-2	Library Area 03/12/14 59-IA-2	Library Area 03/31/15 59-IA-2
Volatile Organics										
Chlorodifluoromethane	22,000	ug/m3	4.5	1.8 J	1.6 J	2.7 J	1.2 J	3.6	NA	NA
Chloroethane	4,400	ug/m3	ND(2.6){0.53}	ND(2.6){0.53}	ND(2.6){0.53}	ND(2.6){0.53}	ND(1.3){0.042}	ND(2.6){0.53}	ND(9.3){0.98}	NA
Chloroform	0.53	ug/m3	ND(4.9){0.98}	ND(4.9){0.98}	ND(4.9){0.98}	ND(4.9){0.98}	ND(0.98){0.15}	ND(4.9){0.98}	ND(4.3){0.96}	0.25 J
Chloromethane	39	ug/m3	1.1 J	0.86 J	0.97 J	1.5 J	1.1	1.3 J	ND(18){1.2}	NA
cis-1,2-Dichloroethene	--	ug/m3	ND(4){0.79}	ND(4){0.79}	ND(4){0.79}	ND(4){0.79}	ND(0.79){0.056}	ND(4){0.79}	ND(3.5){0.68}	NA
cis-1,3-Dichloropropene	--	ug/m3	ND(4.5){0.91}	ND(4.5){0.91}	ND(4.5){0.91}	ND(4.5){0.91}	ND(0.91){0.073}	ND(4.5){0.91}	ND(4){0.7}	NA
Cyclohexane	2,600	ug/m3	NA	NA	NA	NA	0.14 J	ND(3.4){0.69}	ND(3){0.84}	NA
Dibromochloromethane	--	ug/m3	ND(8.5){1.7}	ND(8.5){1.7}	ND(8.5){1.7}	ND(8.5){1.7}	ND(1.7){0.18}	ND(8.5){1.7}	ND(7.5){1.8}	NA
Dibromomethane	1.8	ug/m3	ND(7.1){1.4}	ND(7.1){1.4}	ND(7.1){1.4}	ND(7.1){1.4}	NA	ND(7.1){1.4}	NA	NA
Dichlorodifluoromethane	44	ug/m3	2.6 J	2.1 J	2.3 J	2.6 J	2.3 J	2.4 J	2.4 J	NA
Dichlorofluoromethane	--	ug/m3	ND(4.2){0.84}	ND(4.2){0.84}	ND(4.2){0.84}	ND(4.2){0.84}	NA	ND(4.2){0.84}	NA	NA
d-Limonene	--	ug/m3	NA	NA	NA	NA	NA	ND(0){0}	ND(20){20}	NA
Ethanol	--	ug/m3	NA	NA	NA	NA	NA	7.9	6.4 J	NA
Ethyl acetate	31	ug/m3	ND(3.6){0.72}	ND(3.6){0.72}	ND(3.6){0.72}	ND(3.6){0.72}	NA	ND(3.6){1.8}	ND(13){13}	ND(3.2){3.2}
Ethyl Acrylate	3.5	ug/m3	ND(4.1){0.82}	ND(4.1){0.82}	ND(4.1){0.82}	ND(4.1){0.82}	NA	ND(4.1){0.82}	NA	NA
Ethyl Methacrylate	130	ug/m3	ND(4.7){0.93}	ND(4.7){0.93}	ND(4.7){0.93}	ND(4.7){0.93}	NA	ND(4.7){0.93}	NA	NA
Ethylbenzene	4.9	ug/m3	1.9 J	1.3 J	ND(4.3){0.87}	0.88 J	0.16 J	14	ND(3.8){1.1}	0.11 J
Heptane	180	ug/m3	1.1 J	ND(4.1){0.82}	ND(4.1){0.82}	1 J	0.27 J	ND(4.1){0.82}	ND(3.6){1.2}	NA
Iodomethane	--	ug/m3	ND(5.8){1.2}	ND(5.8){1.2}	ND(5.8){1.2}	ND(5.8){1.2}	NA	ND(5.8){1.2}	NA	NA
Isooctane	--	ug/m3	1.3 J	ND(4.7){0.93}	ND(4.7){0.93}	ND(4.7){0.93}	ND(0.93){0.17}	ND(4.7){0.93}	ND(4.1){0.32}	NA
Isopropyl alcohol	88	ug/m3	NA	NA	NA	NA	0.85 J	1.9 J	1 J	NA
Isopropylbenzene	180	ug/m3	ND(4.9){0.98}	ND(4.9){0.98}	ND(4.9){0.98}	ND(4.9){0.98}	ND(0.98){0.15}	ND(4.9){0.98}	ND(4.4){0.86}	NA
m&p-Xylene	--	ug/m3	5	3.2 J	1.3 J	2.8 J	NA	34	1.9 J	0.41 J
Methyl Acrylate	8.8	ug/m3	ND(3.5){0.7}	ND(3.5){0.7}	ND(3.5){0.7}	ND(3.5){0.7}	NA	ND(3.5){0.7}	NA	NA
Methyl Methacrylate	310	ug/m3	ND(4.1){0.82}	ND(4.1){0.82}	ND(4.1){0.82}	ND(4.1){0.82}	ND(2){0.053}	ND(4.1){0.82}	ND(36){36}	NA
Methyl tert-butyl ether	47	ug/m3	2.6 J	ND(3.6){0.72}	ND(3.6){0.72}	ND(3.6){0.72}	ND(0.72){0.058}	ND(3.6){0.72}	ND(3.2){0.43}	ND(0.65){0.078}
Methylene Chloride	260	ug/m3	ND(3.5){0.69}	ND(3.5){0.69}	0.96 J	ND(3.5){0.69}	1.4 J	1 J	ND(31){1.6}	NA
n-Butane	--	ug/m3	NA	NA	NA	NA	1.3	NA	NA	NA
n-Butyl Acetate	--	ug/m3	NA	NA	NA	NA	NA	ND(0){0}	ND(42){42}	NA
n-Butylbenzene	--	ug/m3	NA	NA	NA	NA	ND(1.1){0.3}	NA	NA	NA
n-Hexane	310	ug/m3	81	13	37	71	28	20	8.6	27
n-Octane	--	ug/m3	1.2 J	ND(4.7){0.93}	ND(4.7){0.93}	ND(4.7){0.93}	NA	4 J	ND(16){16}	NA
Nonane	8.8	ug/m3	NA	NA	NA	NA	NA	ND(0){0}	ND(18){18}	NA
n-Propylbenzene	440	ug/m3	NA	NA	NA	NA	ND(0.98){0.25}	1 J	ND(4.4){0.66}	NA
o-Xylene	44	ug/m3	1.9 J	1.1 J	ND(4.3){0.87}	1 J	NA	18	ND(3.8){0.79}	0.17 J
Pentane	440	ug/m3	7.7	5.2	2.3 J	3.3	NA	26	NA	NA
p-Isopropyltoluene	--	ug/m3	NA	NA	NA	NA	ND(1.1){0.26}	NA	NA	NA
Propene	1,300	ug/m3	6.9	3.8	6.8	0.59 J	NA	ND(1.7){0.34}	ND(6.1){1.2}	NA
sec-Butylbenzene	--	ug/m3	NA	NA	NA	NA	ND(1.1){0.26}	NA	NA	NA
Styrene	440	ug/m3	ND(4.3){0.85}	ND(4.3){0.85}	ND(4.3){0.85}	ND(4.3){0.85}	ND(0.85){0.13}	ND(4.3){0.85}	ND(3.8){0.98}	NA

Table 6
Cumulative Summary of Indoor Air Data for Building 59

Indoor Air Investigation and Assessment Summary Report for Building 59 – Summer 2017

Groundwater Management Area 3

General Electric Company - Pittsfield, Massachusetts

(Results are presented in ug/m3)

Location ID: Date Collected: Sample Name:	VISL 2017 Indoor Air_THQ = 0.1	Units	Library Area 10/11/07 59-IA-2	Library Area 10/29/08 59-IA-2	Library Area 10/20/09 59-IA-2	Library Area 11/18/10 59-IA-02	Library Area 10/20/11 59-IA-2	Library Area 10/25/12 59-IA-2	Library Area 03/12/14 59-IA-2	Library Area 03/31/15 59-IA-2
Volatile Organics										
tert-Butylbenzene	--	ug/m3	NA	NA	NA	NA	ND(1.1){0.26}	NA	NA	NA
Tertiary butyl alcohol	--	ug/m3	0.61 J	ND(3){0.61}	ND(3){0.61}	ND(3){0.61}	0.26 J	ND(3){1.5}	NA	NA
Tetrachloroethene	18	ug/m3	ND(6.8){1.4}	ND(6.8){1.4}	ND(6.8){1.4}	ND(6.8){1.4}	ND(1.4){0.075}	13	ND(6){1.3}	ND(1.2){0.15}
Toluene	2,200	ug/m3	12	8.6	3 J	6.5	0.74	6	1.8 J	0.77
trans-1,2-Dichloroethene	--	ug/m3	ND(4){0.79}	ND(4){0.79}	ND(4){0.79}	ND(4){0.79}	ND(0.79){0.13}	ND(4){0.79}	ND(3.5){1}	NA
trans-1,3-Dichloropropene	--	ug/m3	ND(4.5){0.91}	ND(4.5){0.91}	ND(4.5 J){0.91}	ND(4.5){0.91}	ND(0.91){0.091}	ND(4.5){0.91}	ND(4){0.96}	NA
Trichloroethene	0.88	ug/m3	15	15	7.9	5.7	1.1	9.2	31	26
Trichlorofluoromethane	--	ug/m3	110	44	30	27	2.8	16	23	24
Vinyl Acetate	88	ug/m3	ND(3.5){0.7}	ND(3.5){0.7}	ND(3.5){1.8}	ND(3.5){1.8}	NA	ND(3.5){1.8}	ND(12){3.1}	NA
Vinyl Chloride	2.8	ug/m3	ND(2.6){0.51}	ND(2.6){0.51}	ND(2.6){0.51}	ND(2.6){0.51}	ND(0.51){0.074}	ND(2.6){0.51}	ND(2.3){0.46}	NA
Xylenes (total)	44	ug/m3	NA	NA	NA	NA	0.61 J	NA	NA	NA
Semivolatile Organics										
1,2,4-Trichlorobenzene	0.88	ug/m3	ND(15){3.7}	ND(15){3.7}	ND(15){3.7}	ND(15){3.7}	ND(3.7 J){0.37}	5.1 J	ND(26){3.8}	ND(6.7){0.4}
1,2-Dichlorobenzene	88	ug/m3	ND(6){1.8}	ND(6){1.2}	ND(6){1.2}	ND(6){1.2}	ND(1.2){0.29}	7.5	ND(5.3){1.1}	NA
1,3-Dichlorobenzene	--	ug/m3	ND(6){1.8}	ND(6){1.2}	ND(6){1.2}	ND(6){1.2}	ND(1.2){0.26}	7.1	ND(5.3){0.86}	NA
1,4-Dichlorobenzene	1.1	ug/m3	ND(6){1.8}	ND(6){1.2}	ND(6){1.2}	ND(6){1.2}	ND(1.2){0.26}	8.3	ND(5.3){1.1}	0.33 J
Benzyl Chloride	0.25	ug/m3	NA	NA	NA	NA	ND(1){0.24}	ND(5.2){2.6}	ND(4.6){0.64}	NA
Hexachlorobutadiene	0.56	ug/m3	ND(21){5.3}	ND(21){5.3}	ND(21){5.3}	ND(21){5.3}	ND(2.1){0.69}	4.3 J	ND(38){6.5}	ND(9.6){0.35}
Hexachloroethane	1.1	ug/m3	ND(9.7){1.9}	ND(9.7){1.9}	ND(9.7){1.9}	ND(9.7){1.9}	NA	ND(9.7){1.9}	NA	NA
Naphthalene	0.36	ug/m3	ND(5.2){2.1}	ND(5.2){2.1}	ND(5.2 J){2.1}	5.5	ND(2.6 J){0.45}	3.6 J	ND(18){0.38}	ND(4.7){0.12}
Tetrahydrofuran	880	ug/m3	NA	NA	NA	NA	ND(15){0.053}	ND(2.9){0.59}	ND(2.6){0.45}	NA

Table 6
Cumulative Summary of Indoor Air Data for Building 59

Indoor Air Investigation and Assessment Summary Report for Building 59 – Summer 2017

Groundwater Management Area 3

General Electric Company - Pittsfield, Massachusetts

(Results are presented in ug/m3)

Location ID: Date Collected: Sample Name:	VISL 2017 Indoor Air_THQ = 0.1	Units	Library Area 03/16/16 59-IA-2	Library Area 08/24/16 59-IA-2	Library Area 03/17/17 59-IA-2	Library Area 09/01/17 59-IA-2
Volatile Organics						
1,1,1,2-Tetrachloroethane	1.7	ug/m3	NA	NA	NA	NA
1,1,1-Trichloroethane	2,200	ug/m3	NA	NA	NA	NA
1,1,2,2-Tetrachloroethane	0.21	ug/m3	ND(1.2){0.16} [ND(1.2){0.16}]	ND(1.1){0.15} [ND(1.2){0.16}]	ND(1.1){0.26} [ND(1.2){0.27}]	ND(1.1){0.24}
1,1,2-trichloro-1,2,2-trifluoroethane	2,200	ug/m3	NA	NA	NA	NA
1,1,2-Trichloroethane	0.088	ug/m3	NA	NA	NA	NA
1,1-Dichloroethane	7.7	ug/m3	NA	NA	NA	NA
1,1-Dichloroethene	88	ug/m3	NA	NA	NA	NA
1,2,3-Trichloropropane	0.13	ug/m3	ND(5.1){1} [ND(5.2){1}]	ND(5){1} [ND(5.3){1}]	ND(4.9){0.38} [ND(5.2){0.4}]	ND(5){1.2}
1,2,4-Trimethylbenzene	26	ug/m3	0.23 J [ND(0.84){0.19}]	0.41 J [ND(0.86 J){0.19}]	0.26 J [0.21 J]	0.32 J
1,2-Dibromo-3-chloropropane	0.002	ug/m3	NA	NA	NA	NA
1,2-Dibromoethane	0.02	ug/m3	NA	NA	NA	NA
1,2-Dichloro-1,1,2,2-tetrafluoroethane	--	ug/m3	NA	NA	NA	NA
1,2-Dichloroethane	0.47	ug/m3	NA	NA	NA	NA
1,2-Dichloroethene (total)	--	ug/m3	NA	NA	NA	NA
1,2-Dichloropropane	1.8	ug/m3	NA	NA	NA	NA
1,3,5-Trimethylbenzene	--	ug/m3	NA	NA	NA	NA
1,3-Butadiene	0.41	ug/m3	NA	NA	NA	NA
1,4-Dioxane	2.5	ug/m3	NA	NA	NA	NA
2-Butanone	2,200	ug/m3	NA	NA	NA	NA
2-Chlorotoluene	--	ug/m3	NA	NA	NA	NA
2-Hexanone	13	ug/m3	NA	NA	NA	NA
3-Chloropropene	0.44	ug/m3	NA	NA	NA	NA
4-Ethyltoluene	--	ug/m3	NA	NA	NA	NA
4-Methyl-2-pentanone	1,300	ug/m3	NA	NA	NA	NA
Acetone	14,000	ug/m3	NA	NA	NA	NA
Acetonitrile	26	ug/m3	ND(1.4){1.4} [ND(1.4){1.4}]	ND(1.4){1.4} [ND(1.5){1.5}]	ND(1.4){1.4} [ND(1.4){1.4}]	ND(1.4){0}
Acrolein	0.0088	ug/m3	1.9 J [2 J]	2.6 [ND(2){2}]	ND(2.1){2.1} [ND(2.2){2.2}]	ND(1.9){0}
Acrylonitrile	0.18	ug/m3	NA	NA	NA	NA
Alpha Methyl Styrene	--	ug/m3	NA	NA	NA	NA
alpha-Pinene	--	ug/m3	NA	NA	NA	NA
Benzene	1.6	ug/m3	ND(0.57){0.056} [ND(0.58){0.057}]	0.4 J [0.48 J]	ND(0.62){0.088} [ND(0.59){0.091}]	0.33 J
Bromobenzene	26	ug/m3	NA	NA	NA	NA
Bromodichloromethane	0.33	ug/m3	NA	NA	NA	NA
Bromoethene	0.38	ug/m3	NA	NA	NA	NA
Bromoform	11	ug/m3	NA	NA	NA	NA
Bromomethane	2.2	ug/m3	ND(3.3){0.55} [ND(3.3){0.56}]	ND(3.2){0.54} [ND(3.4){0.57}]	ND(3.2){0.44} [ND(3.3){0.46}]	ND(3.2){0.59}
Carbon Disulfide	310	ug/m3	ND(2.6){0.72} [ND(2.7){0.73}]	ND(2.6){0.71} [ND(2.7){0.74}]	ND(2.6){0.44} [ND(2.7){0.46}]	ND(2.6){0.28}
Carbon Tetrachloride	2	ug/m3	NA	NA	NA	NA
Chlorobenzene	22	ug/m3	NA	NA	NA	NA

Table 6
Cumulative Summary of Indoor Air Data for Building 59

Indoor Air Investigation and Assessment Summary Report for Building 59 – Summer 2017

Groundwater Management Area 3

General Electric Company - Pittsfield, Massachusetts

(Results are presented in ug/m3)

Location ID: Date Collected: Sample Name:	VISL 2017 Indoor Air_THQ = 0.1	Units	Library Area 03/16/16 59-IA-2	Library Area 08/24/16 59-IA-2	Library Area 03/17/17 59-IA-2	Library Area 09/01/17 59-IA-2
Volatile Organics						
Chlorodifluoromethane	22,000	ug/m3	NA	NA	NA	NA
Chloroethane	4,400	ug/m3	NA	NA	NA	NA
Chloroform	0.53	ug/m3	ND(0.82){0.33} [ND(0.83){0.34}]	0.39 J [0.36 J]	0.22 J [0.21 J]	ND(0.8){0.19}
Chloromethane	39	ug/m3	NA	NA	NA	NA
cis-1,2-Dichloroethene	--	ug/m3	NA	NA	NA	NA
cis-1,3-Dichloropropene	--	ug/m3	NA	NA	NA	NA
Cyclohexane	2,600	ug/m3	NA	NA	NA	NA
Dibromochloromethane	--	ug/m3	NA	NA	NA	NA
Dibromomethane	1.8	ug/m3	NA	NA	NA	NA
Dichlorodifluoromethane	44	ug/m3	NA	NA	NA	NA
Dichlorofluoromethane	--	ug/m3	NA	NA	NA	NA
d-Limonene	--	ug/m3	NA	NA	NA	NA
Ethanol	--	ug/m3	NA	NA	NA	NA
Ethyl acetate	31	ug/m3	ND(3){3} [ND(3.1){3.1}]	ND(3){3} [ND(3.2){3.2}]	ND(3){3} [ND(3.1){3.1}]	ND(3){1}
Ethyl Acrylate	3.5	ug/m3	NA	NA	NA	NA
Ethyl Methacrylate	130	ug/m3	NA	NA	NA	NA
Ethylbenzene	4.9	ug/m3	0.21 J [0.24 J]	0.31 J [0.24 J]	0.21 J [ND(0.74){0.21}]	0.17 J
Heptane	180	ug/m3	NA	NA	NA	NA
Iodomethane	--	ug/m3	NA	NA	NA	NA
Isooctane	--	ug/m3	NA	NA	NA	NA
Isopropyl alcohol	88	ug/m3	NA	NA	NA	NA
Isopropylbenzene	180	ug/m3	NA	NA	NA	NA
m&p-Xylene	--	ug/m3	0.86 [0.71 J]	1.2 [0.79]	0.77 [0.58 J]	0.62 J
Methyl Acrylate	8.8	ug/m3	NA	NA	NA	NA
Methyl Methacrylate	310	ug/m3	NA	NA	NA	NA
Methyl tert-butyl ether	47	ug/m3	ND(0.6){0.16} [ND(0.62){0.16}]	ND(0.6){0.16} [ND(0.63){0.17}]	ND(0.59){0.12} [ND(0.62){0.13}]	ND(0.59){0.19}
Methylene Chloride	260	ug/m3	NA	NA	NA	NA
n-Butane	--	ug/m3	NA	NA	NA	NA
n-Butyl Acetate	--	ug/m3	NA	NA	NA	NA
n-Butylbenzene	--	ug/m3	NA	NA	NA	NA
n-Hexane	310	ug/m3	6.2 [4.9]	3.2 J [3.8 J]	16 [16]	6.5
n-Octane	--	ug/m3	NA	NA	NA	NA
Nonane	8.8	ug/m3	NA	NA	NA	NA
n-Propylbenzene	440	ug/m3	NA	NA	NA	NA
o-Xylene	44	ug/m3	0.23 J [0.2 J]	0.46 J [0.35 J]	ND(0.71){0.093} [ND(0.74){0.097}]	0.21 J
Pentane	440	ug/m3	NA	NA	NA	NA
p-Isopropyltoluene	--	ug/m3	NA	NA	NA	NA
Propene	1,300	ug/m3	NA	NA	NA	NA
sec-Butylbenzene	--	ug/m3	NA	NA	NA	NA
Styrene	440	ug/m3	NA	NA	NA	NA

Table 6
Cumulative Summary of Indoor Air Data for Building 59

Indoor Air Investigation and Assessment Summary Report for Building 59 – Summer 2017

Groundwater Management Area 3

General Electric Company - Pittsfield, Massachusetts

(Results are presented in ug/m3)

Location ID: Date Collected: Sample Name:	VISL 2017 Indoor Air_THQ = 0.1	Units	Library Area 03/16/16 59-IA-2	Library Area 08/24/16 59-IA-2	Library Area 03/17/17 59-IA-2	Library Area 09/01/17 59-IA-2
Volatile Organics						
tert-Butylbenzene	--	ug/m3	NA	NA	NA	NA
Tertiary butyl alcohol	--	ug/m3	NA	NA	NA	NA
Tetrachloroethene	18	ug/m3	ND(1.1){0.18} [ND(1.2){0.18}]	ND(1.1){0.18} [ND(1.2){0.19}]	ND(1.1){0.53} [ND(1.2){0.56}]	ND(1.1){0.26}
Toluene	2,200	ug/m3	0.89 [0.92]	2.5 [1.8]	5.5 [5.2]	13
trans-1,2-Dichloroethene	--	ug/m3	NA	NA	NA	NA
trans-1,3-Dichloropropene	--	ug/m3	NA	NA	NA	NA
Trichloroethene	0.88	ug/m3	0.94 [1.1]	1.3 [1.2]	1.4 [1.5]	1
Trichlorofluoromethane	--	ug/m3	11 [8.9]	62 [71]	16 [16]	54
Vinyl Acetate	88	ug/m3	NA	NA	NA	NA
Vinyl Chloride	2.8	ug/m3	NA	NA	NA	NA
Xylenes (total)	44	ug/m3	NA	NA	NA	NA
Semivolatile Organics						
1,2,4-Trichlorobenzene	0.88	ug/m3	ND(6.2){0.51} [ND(6.3){0.52}]	ND(6.2){0.5} [ND(6.5){0.53}]	0.46 J [ND(6.3){0.4}]	ND(6.1){0.3}
1,2-Dichlorobenzene	88	ug/m3	NA	NA	NA	NA
1,3-Dichlorobenzene	--	ug/m3	NA	NA	NA	NA
1,4-Dichlorobenzene	1.1	ug/m3	ND(1){0.18} [ND(1){0.18}]	0.33 J [0.38 J]	ND(0.99){0.21} [ND(1){0.22}]	1.1
Benzyl Chloride	0.25	ug/m3	NA	NA	NA	NA
Hexachlorobutadiene	0.56	ug/m3	ND(9){0.58} [ND(9.1){0.59}]	ND(8.8){0.57} [ND(9.3){0.6}]	ND(8.7){0.52} [ND(9.1){0.54}]	ND(8.8){1.4}
Hexachloroethane	1.1	ug/m3	NA	NA	NA	NA
Naphthalene	0.36	ug/m3	0.2 J [0.19 J]	0.36 J [0.6 J]	ND(4.3){0.14} [ND(4.5){0.14}]	ND(4.3){0.21}
Tetrahydrofuran	880	ug/m3	NA	NA	NA	NA

Table 6
Cumulative Summary of Indoor Air Data for Building 59

Indoor Air Investigation and Assessment Summary Report for Building 59 – Summer 2017

Groundwater Management Area 3

General Electric Company - Pittsfield, Massachusetts

(Results are presented in ug/m3)

Location ID: Date Collected: Sample Name:	VISL 2017 Indoor Air THQ = 0.1	Units	Lobby Area 09/28/06 Summa Canister #0189	Lobby Area 09/28/06 Summa Canister #0200	Lobby Area 10/11/07 59-IA-3	Lobby Area 10/29/08 59-IA-3	Lobby Area 10/20/09 59-IA-3	Lobby Area 11/18/10 59-IA-03
Volatile Organics								
1,1,1,2-Tetrachloroethane	1.7	ug/m3	ND(6.9){1.4}	ND(6.9){1.4}	ND(6.9){1.4}	ND(6.9){1.4}	ND(6.9){1.4}	ND(6.9){1.4}
1,1,1-Trichloroethane	2,200	ug/m3	ND(5.5){1.1}	ND(5.5){1.1}	ND(5.5){1.1}	ND(5.5){1.1}	ND(5.5){1.1}	ND(5.5){1.1}
1,1,2,2-Tetrachloroethane	0.21	ug/m3	ND(6.9){1.4}	ND(6.9){1.4}	ND(6.9){1.4}	ND(6.9){1.4}	ND(6.9){1.4}	ND(6.9){1.4}
1,1,2-trichloro-1,2,2-trifluoroethane	2,200	ug/m3	ND(7.7){3.8}	ND(7.7){3.8}	ND(7.7){3.8}	ND(15){3.8}	ND(15){3.8}	ND(15){3.8}
1,1,2-Trichloroethane	0.088	ug/m3	ND(5.5){1.1}	ND(5.5){1.1}	ND(5.5){1.1}	ND(5.5){1.1}	ND(5.5 J){1.1}	ND(5.5){1.1}
1,1-Dichloroethane	7.7	ug/m3	ND(4){0.81}	ND(4){0.81}	ND(4){0.81}	ND(4){0.81}	ND(4){0.81}	ND(4){0.81}
1,1-Dichloroethene	88	ug/m3	ND(4){0.79}	ND(4){0.79}	ND(4){0.79}	ND(4){0.79}	ND(4){0.79}	ND(4){0.79}
1,2,3-Trichloropropane	0.13	ug/m3	ND(6){1.2}	ND(6){1.2}	ND(6){1.2}	ND(6){1.2}	ND(6){1.2}	ND(6){1.2}
1,2,4-Trimethylbenzene	26	ug/m3	ND(4.9){0.98}	1.4 J	ND(4.9){0.98}	ND(4.9){0.98}	ND(4.9){0.98}	ND(4.9){0.98}
1,2-Dibromo-3-chloropropane	0.002	ug/m3	NA	NA	NA	NA	NA	NA
1,2-Dibromoethane	0.02	ug/m3	ND(7.7){1.5}	ND(7.7){1.5}	ND(7.7){1.5}	ND(7.7){1.5}	ND(7.7){1.5}	ND(7.7){1.5}
1,2-Dichloro-1,1,2,2-tetrafluoroethane	--	ug/m3	ND(7){1.4}	ND(7){1.4}	ND(7){1.4}	ND(7){1.4}	ND(7){1.4}	ND(7){1.4}
1,2-Dichloroethane	0.47	ug/m3	ND(4){0.81}	ND(4){0.81}	ND(4){0.81}	ND(4){0.81}	ND(4){0.81}	ND(4){0.81}
1,2-Dichloroethene (total)	--	ug/m3	NA	NA	NA	NA	NA	NA
1,2-Dichloropropane	1.8	ug/m3	ND(4.6){0.92}	ND(4.6){0.92}	ND(4.6){0.92}	ND(4.6){0.92}	ND(4.6){0.92}	ND(4.6){0.92}
1,3,5-Trimethylbenzene	--	ug/m3	2 J	ND(4.9){0.98}	0.98 J	ND(4.9){0.98}	ND(4.9){0.98}	ND(4.9){0.98}
1,3-Butadiene	0.41	ug/m3	ND(4.4){1.1}	ND(4.4){1.1}	ND(4.4){1.1}	ND(4.4){1.1}	ND(4.4){1.1}	ND(4.4){1.1}
1,4-Dioxane	2.5	ug/m3	ND(3.6){0.72}	ND(3.6){0.72}	ND(3.6){0.72}	ND(3.6){0.72}	ND(3.6){0.72}	ND(3.6){0.72}
2-Butanone	2,200	ug/m3	ND(5.9){1.5}	2.1 J	3.3 J	10	1.7 J	1.6 J
2-Chlorotoluene	--	ug/m3	NA	NA	NA	NA	NA	NA
2-Hexanone	13	ug/m3	ND(8.2){2}	ND(8.2){2}	ND(8.2){2}	3.3 J	ND(8.2){2}	ND(8.2){2}
3-Chloropropene	0.44	ug/m3	ND(3.1){0.63}	ND(3.1){0.63}	ND(3.1){1.6}	ND(3.1){0.63}	ND(3.1){0.63}	ND(3.1){0.63}
4-Ethyltoluene	--	ug/m3	ND(4.9){0.98}	ND(4.9){0.98}	ND(4.9){0.98}	ND(4.9){0.98}	ND(4.9){0.98}	ND(4.9){0.98}
4-Methyl-2-pentanone	1,300	ug/m3	ND(8.2){2}	ND(8.2){2}	ND(8.2){2}	ND(8.2){2}	ND(8.2){2}	ND(8.2){2}
Acetone	14,000	ug/m3	29	29	25	36	19	12
Acetonitrile	26	ug/m3	ND(3.4){0.84}	ND(3.4){0.84}	ND(3.4 J){0.84}	1.7 J	ND(3.4){0.84}	ND(3.4){0.84}
Acrolein	0.0088	ug/m3	ND(4.6){1.1}	ND(4.6){1.1}	2 J	ND(4.6){1.1}	ND(4.6){1.1}	ND(4.6){1.1}
Acrylonitrile	0.18	ug/m3	ND(4.3){1.1}	ND(4.3){1.1}	ND(4.3){1.1}	ND(4.3){1.1}	ND(4.3){1.1}	ND(4.3){1.1}
Alpha Methyl Styrene	--	ug/m3	ND(4.8){0.97}	ND(4.8){0.97}	ND(4.8){0.97}	ND(4.8){0.97}	ND(4.8){0.97}	ND(4.8){0.97}
alpha-Pinene	--	ug/m3	NA	NA	NA	NA	NA	NA
Benzene	1.6	ug/m3	0.67 J	1.5 J	1.1 J	ND(3.2){0.64}	0.95 J	ND(3.2){0.64}
Bromobenzene	26	ug/m3	ND(6.4){1.3}	ND(6.4){1.3}	ND(6.4){1.3}	ND(6.4){1.3}	ND(6.4){1.3}	ND(6.4){1.3}
Bromodichloromethane	0.33	ug/m3	ND(6.7){1.3}	ND(6.7){1.3}	ND(6.7){1.3}	ND(6.7){1.3}	ND(6.7){1.3}	ND(6.7){1.3}
Bromoethene	0.38	ug/m3	NA	NA	NA	NA	NA	NA
Bromoform	11	ug/m3	ND(10){2.1}	ND(10){2.1}	ND(10){2.1}	ND(10){2.1}	ND(10){2.1}	ND(10){2.1}
Bromomethane	2.2	ug/m3	ND(3.9){0.78}	ND(3.9){0.78}	ND(3.9){0.78}	ND(3.9){0.78}	ND(3.9){0.78}	ND(3.9){0.78}
Carbon Disulfide	310	ug/m3	ND(3.1){0.62}	ND(3.1){0.62}	ND(3.1){0.62}	ND(3.1){0.62}	ND(3.1){0.62}	ND(3.1){0.62}
Carbon Tetrachloride	2	ug/m3	ND(6.3){1.3}	ND(6.3){1.3}	ND(6.3){1.3}	ND(6.3){1.3}	ND(6.3){1.3}	ND(6.3){1.3}
Chlorobenzene	22	ug/m3	ND(4.6){0.92}	ND(4.6){0.92}	ND(4.6){0.92}	ND(4.6){0.92}	ND(4.6){0.92}	ND(4.6){0.92}

Table 6
Cumulative Summary of Indoor Air Data for Building 59

Indoor Air Investigation and Assessment Summary Report for Building 59 – Summer 2017

Groundwater Management Area 3
General Electric Company - Pittsfield, Massachusetts
(Results are presented in ug/m3)

Location ID: Date Collected: Sample Name:	VISL 2017 Indoor Air THQ = 0.1	Units	Lobby Area 09/28/06 Summa Canister #0189	Lobby Area 09/28/06 Summa Canister #0200	Lobby Area 10/11/07 59-IA-3	Lobby Area 10/29/08 59-IA-3	Lobby Area 10/20/09 59-IA-3	Lobby Area 11/18/10 59-IA-03
Volatile Organics								
Chlorodifluoromethane	22,000	ug/m3	2.5 J	4.9	3 J	ND(3.5){0.71}	1.7 J	1.9 J
Chloroethane	4,400	ug/m3	ND(2.6){0.53}	ND(2.6){0.53}	ND(2.6){0.53}	ND(2.6){0.53}	ND(2.6){0.53}	ND(2.6){0.53}
Chloroform	0.53	ug/m3	ND(4.9){0.98}	ND(4.9){0.98}	ND(4.9){0.98}	ND(4.9){0.98}	ND(4.9){0.98}	ND(4.9){0.98}
Chloromethane	39	ug/m3	0.89 J	0.78 J	1.2 J	0.87 J	0.9 J	1.4 J
cis-1,2-Dichloroethene	--	ug/m3	ND(4){0.79}	ND(4){0.79}	ND(4){0.79}	ND(4){0.79}	ND(4){0.79}	ND(4){0.79}
cis-1,3-Dichloropropene	--	ug/m3	ND(4.5){0.91}	ND(4.5){0.91}	ND(4.5){0.91}	ND(4.5){0.91}	ND(4.5){0.91}	ND(4.5){0.91}
Cyclohexane	2,600	ug/m3	NA	NA	NA	NA	NA	NA
Dibromochloromethane	--	ug/m3	ND(8.5){1.7}	ND(8.5){1.7}	ND(8.5){1.7}	ND(8.5){1.7}	ND(8.5){1.7}	ND(8.5){1.7}
Dibromomethane	1.8	ug/m3	ND(7.1){1.4}	ND(7.1){1.4}	ND(7.1){1.4}	ND(7.1){1.4}	ND(7.1){1.4}	ND(7.1){1.4}
Dichlorodifluoromethane	44	ug/m3	2.4 J	2.7 J	3.1 J	2.7 J	2.5 J	2.9 J
Dichlorofluoromethane	--	ug/m3	ND(4.2){0.84}	ND(4.2){0.84}	ND(4.2){0.84}	ND(4.2){0.84}	ND(4.2){0.84}	ND(4.2){0.84}
d-Limonene	--	ug/m3	NA	NA	NA	NA	NA	NA
Ethanol	--	ug/m3	NA	NA	NA	NA	NA	NA
Ethyl acetate	31	ug/m3	ND(3.6){0.72}	ND(3.6){0.72}	ND(3.6){0.72}	ND(3.6){0.72}	ND(3.6){0.72}	ND(3.6){0.72}
Ethyl Acrylate	3.5	ug/m3	ND(4.1){0.82}	ND(4.1){0.82}	ND(4.1){0.82}	ND(4.1){0.82}	ND(4.1){0.82}	ND(4.1){0.82}
Ethyl Methacrylate	130	ug/m3	ND(4.7){0.93}	ND(4.7){0.93}	ND(4.7){0.93}	ND(4.7){0.93}	ND(4.7){0.93}	ND(4.7){0.93}
Ethylbenzene	4.9	ug/m3	ND(4.3){0.87}	0.87 J	ND(4.3){0.87}	ND(4.3){0.87}	ND(4.3){0.87}	ND(4.3){0.87}
Heptane	180	ug/m3	ND(4.1){0.82}	1.7 J	ND(4.1){0.82}	ND(4.1){0.82}	1 J	ND(4.1){0.82}
Iodomethane	--	ug/m3	ND(5.8){1.2}	ND(5.8){1.2}	ND(5.8){1.2}	ND(5.8){1.2}	ND(5.8){1.2}	ND(5.8){1.2}
Isocotane	--	ug/m3	1.1 J	1.4 J	ND(4.7){0.93}	ND(4.7){0.93}	ND(4.7){0.93}	ND(4.7){0.93}
Isopropyl alcohol	88	ug/m3	NA	NA	NA	NA	NA	NA
Isopropylbenzene	180	ug/m3	ND(4.9){0.98}	ND(4.9){0.98}	ND(4.9){0.98}	ND(4.9){0.98}	ND(4.9){0.98}	ND(4.9){0.98}
m&p-Xylene	--	ug/m3	0.96 J	2.2 J	1.8 J	1.1 J	1 J	ND(4.3){0.87}
Methyl Acrylate	8.8	ug/m3	ND(3.5){0.7}	ND(3.5){0.7}	ND(3.5){0.7}	ND(3.5){0.7}	ND(3.5){0.7}	ND(3.5){0.7}
Methyl Methacrylate	310	ug/m3	ND(4.1){0.82}	ND(4.1){0.82}	ND(4.1){0.82}	ND(4.1){0.82}	ND(4.1){0.82}	ND(4.1){0.82}
Methyl tert-butyl ether	47	ug/m3	ND(3.6){0.72}	ND(3.6){0.72}	0.72 J	ND(3.6){0.72}	ND(3.6){0.72}	ND(3.6){0.72}
Methylene Chloride	260	ug/m3	6.6	2.7 J	19	1.1 J	0.9 J	0.75 J
n-Butane	--	ug/m3	NA	NA	NA	NA	NA	NA
n-Butyl Acetate	--	ug/m3	NA	NA	NA	NA	NA	NA
n-Butylbenzene	--	ug/m3	NA	NA	NA	NA	NA	NA
n-Hexane	310	ug/m3	60	230	33	2.5 J	12	18
n-Octane	--	ug/m3	ND(4.7){0.93}	ND(4.7){0.93}	ND(4.7){0.93}	ND(4.7){0.93}	ND(4.7){0.93}	ND(4.7){0.93}
Nonane	8.8	ug/m3	NA	NA	NA	NA	NA	NA
n-Propylbenzene	440	ug/m3	NA	NA	NA	NA	NA	NA
o-Xylene	44	ug/m3	ND(4.3){0.87}	ND(4.3){0.87}	ND(4.3){0.87}	ND(4.3){0.87}	ND(4.3){0.87}	ND(4.3){0.87}
Pentane	440	ug/m3	1.8 J	3.5	3.2	1.4 J	1.7 J	1.1 J
p-Isopropyltoluene	--	ug/m3	NA	NA	NA	NA	NA	NA
Propene	1,300	ug/m3	5.5	11	3.2	2.3	3.2	0.44 J
sec-Butylbenzene	--	ug/m3	NA	NA	NA	NA	NA	NA
Styrene	440	ug/m3	ND(4.3){0.85}	15	ND(4.3){0.85}	ND(4.3){0.85}	ND(4.3){0.85}	ND(4.3){0.85}

Table 6
Cumulative Summary of Indoor Air Data for Building 59

Indoor Air Investigation and Assessment Summary Report for Building 59 – Summer 2017

Groundwater Management Area 3

General Electric Company - Pittsfield, Massachusetts

(Results are presented in ug/m3)

Location ID: Date Collected: Sample Name:	VISL 2017 Indoor Air_THQ = 0.1	Units	Lobby Area 09/28/06 Summa Canister #0189	Lobby Area 09/28/06 Summa Canister #0200	Lobby Area 10/11/07 59-IA-3	Lobby Area 10/29/08 59-IA-3	Lobby Area 10/20/09 59-IA-3	Lobby Area 11/18/10 59-IA-03
Volatile Organics								
tert-Butylbenzene	--	ug/m3	NA	NA	NA	NA	NA	NA
Tertiary butyl alcohol	--	ug/m3	ND(3){0.61}	ND(3){0.61}	0.61 J	3	ND(3){0.61}	ND(3){0.61}
Tetrachloroethene	18	ug/m3	ND(6.8){1.4}	ND(6.8){1.4}	ND(6.8){1.4}	ND(6.8){1.4}	ND(6.8){1.4}	ND(6.8){1.4}
Toluene	2,200	ug/m3	8.2	7.1	6.1	2.5 J	2.3 J	2 J
trans-1,2-Dichloroethene	--	ug/m3	ND(4){0.79}	ND(4){0.79}	ND(4){0.79}	ND(4){0.79}	ND(4){0.79}	ND(4){0.79}
trans-1,3-Dichloropropene	--	ug/m3	ND(4.5){0.91}	ND(4.5){0.91}	ND(4.5){0.91}	ND(4.5){0.91}	ND(4.5){0.91}	ND(4.5){0.91}
Trichloroethene	0.88	ug/m3	5.5	9.1	4.7 J	4.2 J	3.6 J	1.5 J
Trichlorofluoromethane	--	ug/m3	51	73	44	16	25	14
Vinyl Acetate	88	ug/m3	ND(3.5){0.7}	ND(3.5){0.7}	ND(3.5){0.7}	ND(3.5){0.7}	ND(3.5){1.8}	ND(3.5){1.8}
Vinyl Chloride	2.8	ug/m3	ND(2.6){0.51}	ND(2.6){0.51}	ND(2.6){0.51}	ND(2.6){0.51}	ND(2.6){0.51}	ND(2.6){0.51}
Xylenes (total)	44	ug/m3	NA	NA	NA	NA	NA	NA
Semivolatile Organics								
1,2,4-Trichlorobenzene	0.88	ug/m3	ND(15){3.7}	ND(15){3.7}	ND(15){3.7}	ND(15){3.7}	ND(15){3.7}	ND(15){3.7}
1,2-Dichlorobenzene	88	ug/m3	ND(6){1.2}	ND(6){1.2}	ND(6){1.8}	ND(6){1.2}	ND(6){1.2}	ND(6){1.2}
1,3-Dichlorobenzene	--	ug/m3	ND(6){1.2}	ND(6){1.2}	ND(6){1.8}	ND(6){1.2}	ND(6){1.2}	ND(6){1.2}
1,4-Dichlorobenzene	1.1	ug/m3	ND(6){1.2}	ND(6){1.2}	ND(6){1.8}	ND(6){1.2}	ND(6){1.2}	ND(6){1.2}
Benzyl Chloride	0.25	ug/m3	NA	NA	NA	NA	NA	NA
Hexachlorobutadiene	0.56	ug/m3	ND(21){5.3}	12 J	ND(21){5.3}	ND(21){5.3}	ND(21){5.3}	ND(21){5.3}
Hexachloroethane	1.1	ug/m3	ND(9.7){1.9}	ND(9.7){1.9}	ND(9.7){1.9}	ND(9.7){1.9}	ND(9.7){1.9}	ND(9.7){1.9}
Naphthalene	0.36	ug/m3	ND(5.2){2.1}	ND(5.2){2.1}	ND(5.2){2.1}	ND(5.2){2.1}	ND(5.2){2.1}	ND(5.2){2.1}
Tetrahydrofuran	880	ug/m3	NA	NA	NA	NA	NA	NA

Table 6
Cumulative Summary of Indoor Air Data for Building 59

Indoor Air Investigation and Assessment Summary Report for Building 59 – Summer 2017

Groundwater Management Area 3
General Electric Company - Pittsfield, Massachusetts
(Results are presented in ug/m3)

Location ID: Date Collected: Sample Name:	VISL 2017 Indoor Air_THQ = 0.1	Units	Lobby Area 10/20/11 59-IA-3	Lobby Area 10/25/12 59-IA-3	Lobby Area 01/08/13 59-IA-3	Lobby Area 03/12/14 59-IA-3	Lobby Area 03/31/15 59-IA-3
Volatile Organics							
1,1,1,2-Tetrachloroethane	1.7	ug/m3	NA	ND(690){140}	ND(6.9){1.4} [ND(6.9){1.4}]	NA	NA
1,1,1-Trichloroethane	2,200	ug/m3	ND(1.1){0.19}	ND(550){110}	ND(5.5){1.1} [ND(5.5){1.1}]	ND(4.9){1.1} [ND(5){1.1}]	NA
1,1,2,2-Tetrachloroethane	0.21	ug/m3	ND(1.4){0.27}	ND(690){140}	ND(6.9){1.4} [ND(6.9){1.4}]	ND(6.2){1.2} [ND(6.3){1.2}]	ND(1.2){0.14} [ND(1.2){0.14}]
1,1,2-trichloro-1,2,2-trifluoroethane	2,200	ug/m3	0.75 J	ND(1,500){380}	ND(15){3.8} [ND(15){3.8}]	ND(6.9){2.3} [ND(7){2.4}]	NA
1,1,2-Trichloroethane	0.088	ug/m3	ND(1.1){0.1}	ND(550){110}	ND(5.5){1.1} [ND(5.5){1.1}]	ND(4.9){1.4} [ND(5){1.4}]	NA
1,1-Dichloroethane	7.7	ug/m3	ND(0.81){0.14}	ND(400){81}	ND(4){0.81} [ND(4){0.81}]	ND(3.7){0.82} [ND(3.7){0.83}]	NA
1,1-Dichloroethene	88	ug/m3	ND(0.79){0.12}	ND(400){79}	ND(4){0.79} [ND(4){0.79}]	ND(3.6){0.91} [ND(3.6){0.93}]	NA
1,2,3-Trichloropropane	0.13	ug/m3	NA	ND(600){120}	ND(6){1.2} [ND(6){1.2}]	NA	ND(5.1){5.1} [ND(5.1){5.1}]
1,2,4-Trimethylbenzene	26	ug/m3	0.27 J	ND(490){98}	ND(4.9){0.98} [ND(4.9){0.98}]	ND(4.4){1.1} [ND(4.5){1.1}]	0.18 J [ND(0.82){0.073}]
1,2-Dibromo-3-chloropropane	0.002	ug/m3	NA	ND(9,700){9700}	ND(48.34) [ND(48.34)]	ND(35){35} [ND(36){36}]	NA
1,2-Dibromoethane	0.02	ug/m3	ND(1.5){0.14}	ND(770){150}	ND(7.7){1.5} [ND(7.7){1.5}]	ND(7){1.6} [ND(7.1){1.6}]	NA
1,2-Dichloro-1,1,2,2-tetrafluoroethane	--	ug/m3	ND(1.4){0.22}	ND(700){140}	ND(7){1.4} [ND(7){1.4}]	ND(6.3){2.1} [ND(6.4){2.2}]	NA
1,2-Dichloroethane	0.47	ug/m3	ND(0.81){0.13}	ND(400){81}	ND(4){0.81} [ND(4){0.81}]	ND(3.7){1.2} [ND(3.7){1.2}]	NA
1,2-Dichloroethene (total)	--	ug/m3	ND(0.79){0.056}	NA	NA	NA	NA
1,2-Dichloropropane	1.8	ug/m3	0.077 J	ND(460){92}	ND(4.6){0.92} [ND(4.6){0.92}]	ND(4.2){1.7} [ND(4.2){1.8}]	NA
1,3,5-Trimethylbenzene	--	ug/m3	ND(0.98){0.25}	ND(490){98}	ND(4.9){0.98} [ND(4.9){0.98}]	ND(4.4){0.69} [ND(4.5){0.7}]	NA
1,3-Butadiene	0.41	ug/m3	ND(0.44){0.022}	ND(440){88}	ND(4.4){0.88} [ND(4.4){0.88}]	ND(2){0.39} [ND(2){0.4}]	NA
1,4-Dioxane	2.5	ug/m3	ND(18){0.32}	ND(360){180}	ND(3.6){1.8} [ND(3.6){1.8}]	ND(13){2.3} [ND(13){2.4}]	NA
2-Butanone	2,200	ug/m3	1.4 J	ND(590){150}	2.7 J [2.6 J]	1.3 J [1.5 J]	NA
2-Chlorotoluene	--	ug/m3	ND(1){0.24}	NA	NA	NA	NA
2-Hexanone	13	ug/m3	ND(2){0.16}	ND(820){200}	ND(8.2){2} [ND(8.2){2}]	ND(15){1.8} [ND(15){1.8}]	NA
3-Chloropropene	0.44	ug/m3	ND(1.6){0.059}	ND(310){63}	ND(3.1){0.63} [ND(3.1){0.63}]	ND(11){1.4} [ND(12){1.4}]	NA
4-Ethyltoluene	--	ug/m3	ND(0.98){0.23}	ND(490){98}	ND(4.9){0.98} [ND(4.9){0.98}]	ND(4.4){0.93} [ND(4.5){0.95}]	NA
4-Methyl-2-pentanone	1,300	ug/m3	ND(2){0.11}	ND(820){200}	ND(8.2){2} [ND(8.2){2}]	ND(3.7){0.67} [ND(3.8){0.68}]	NA
Acetone	14,000	ug/m3	14	1,100	20 J [23 J]	11 J [28]	NA
Acetonitrile	26	ug/m3	NA	160 J	ND(3.4){0.84} [ND(3.4){0.84}]	ND(15){15} [ND(15){15}]	ND(1.4){1.4} [ND(1.4){1.4}]
Acrolein	0.0088	ug/m3	NA	ND(460){110}	6.4 [1.3 J]	ND(83){83} [ND(84){84}]	ND(1.9){1.9} [ND(1.9){1.9}]
Acrylonitrile	0.18	ug/m3	NA	ND(430){110}	ND(4.3){1.1} [ND(4.3){1.1}]	ND(7.8){7.8} [ND(8){8}]	NA
Alpha Methyl Styrene	--	ug/m3	NA	ND(480){97}	ND(4.8){0.97} [ND(4.8){0.97}]	NA	NA
alpha-Pinene	--	ug/m3	NA	ND(0){0}	ND(27.86) [ND(27.86)]	ND(50){50} [ND(51){51}]	NA
Benzene	1.6	ug/m3	0.39 J	ND(320){64}	1.6 J [1.8 J]	0.76 J [0.77 J]	ND(0.54){0.082} [ND(0.54){0.081}]
Bromobenzene	26	ug/m3	NA	ND(640){130}	ND(6.4){1.3} [ND(6.4){1.3}]	NA	NA
Bromodichloromethane	0.33	ug/m3	ND(1.3){0.19}	ND(670){130}	ND(6.7){1.3} [ND(6.7){1.3}]	ND(6.1){1.4} [ND(6.2){1.5}]	NA
Bromoethene	0.38	ug/m3	ND(0.87){0.083}	NA	NA	NA	NA
Bromoform	11	ug/m3	ND(2.1){0.2}	ND(1,000){210}	ND(10){2.1} [ND(10){2.1}]	ND(9.4){2} [ND(9.5){2}]	NA
Bromomethane	2.2	ug/m3	ND(0.78){0.047}	ND(390){78}	ND(3.9){0.78} [ND(3.9){0.78}]	ND(35){2.3} [ND(36){2.3}]	ND(3.3){0.32} [ND(3.3){0.31}]
Carbon Disulfide	310	ug/m3	ND(1.6){0.21}	ND(310){160}	ND(3.1){1.6} [ND(3.1){1.6}]	ND(11){0.57} [ND(11){0.58}]	ND(2.6){1.1} [ND(2.6){1.1}]
Carbon Tetrachloride	2	ug/m3	0.53 J	ND(630){130}	ND(6.3){1.3} [ND(6.3){1.3}]	ND(5.7){1.2} [ND(5.8){1.2}]	NA
Chlorobenzene	22	ug/m3	ND(0.92){0.092}	ND(460){92}	ND(4.6){0.92} [ND(4.6){0.92}]	ND(4.2){0.65} [ND(4.2){0.66}]	NA

Table 6
Cumulative Summary of Indoor Air Data for Building 59

Indoor Air Investigation and Assessment Summary Report for Building 59 – Summer 2017

Groundwater Management Area 3
General Electric Company - Pittsfield, Massachusetts
(Results are presented in ug/m3)

Location ID: Date Collected: Sample Name:	VISL 2017 Indoor Air_THQ = 0.1	Units	Lobby Area 10/20/11 59-IA-3	Lobby Area 10/25/12 59-IA-3	Lobby Area 01/08/13 59-IA-3	Lobby Area 03/12/14 59-IA-3	Lobby Area 03/31/15 59-IA-3
Volatile Organics							
Chlorodifluoromethane	22,000	ug/m3	2.8	ND(350){71}	ND(3.5){0.71} [2.1 J]	NA	NA
Chloroethane	4,400	ug/m3	ND(1.3){0.042}	ND(260){53}	ND(2.6){0.53} [ND(2.6){0.53}]	ND(9.6){1} [ND(9.7){1}]	NA
Chloroform	0.53	ug/m3	ND(0.98){0.15}	ND(490){98}	ND(4.9){0.98} [ND(4.9){0.98}]	ND(4.4){0.98} [ND(4.5){1}]	ND(0.83){0.14} [0.17 J]
Chloromethane	39	ug/m3	1.5	ND(210){41}	1.8 J [1.4 J]	ND(19){1.2} [ND(19){1.2}]	NA
cis-1,2-Dichloroethene	--	ug/m3	ND(0.79){0.056}	ND(400){79}	ND(4){0.79} [ND(4){0.79}]	ND(3.6){0.69} [ND(3.6){0.7}]	NA
cis-1,3-Dichloropropene	--	ug/m3	ND(0.91){0.073}	ND(450){91}	ND(4.5){0.91} [ND(4.5){0.91}]	ND(4.1){0.72} [ND(4.2){0.73}]	NA
Cyclohexane	2,600	ug/m3	0.2 J	86 J	0.94 J [1.1 J]	ND(3.1){0.86} [ND(3.2){0.88}]	NA
Dibromochloromethane	--	ug/m3	ND(1.7){0.18}	ND(850){170}	ND(8.5){1.7} [ND(8.5){1.7}]	ND(7.7){1.8} [ND(7.8){1.8}]	NA
Dibromomethane	1.8	ug/m3	NA	ND(710){140}	ND(7.1){1.4} [ND(7.1){1.4}]	NA	NA
Dichlorodifluoromethane	44	ug/m3	3.1	ND(490){99}	3 J [3 J]	2.9 J [3.1 J]	NA
Dichlorofluoromethane	--	ug/m3	NA	ND(420){84}	ND(4.2){0.84} [ND(4.2){0.84}]	NA	NA
d-Limonene	--	ug/m3	NA	724 J	ND(27.86) [ND(27.86)]	ND(20){20} [ND(20){20}]	NA
Ethanol	--	ug/m3	NA	1,200	14 [11]	12 [8.7]	NA
Ethyl acetate	31	ug/m3	NA	ND(360){180}	ND(3.6){1.8} [ND(3.6){1.8}]	ND(13){13} [ND(13){13}]	ND(3.1){3.1} [ND(3){3}]
Ethyl Acrylate	3.5	ug/m3	NA	ND(410){82}	ND(4.1){0.82} [ND(4.1){0.82}]	NA	NA
Ethyl Methacrylate	130	ug/m3	NA	ND(470){93}	ND(4.7){0.93} [ND(4.7){0.93}]	NA	NA
Ethylbenzene	4.9	ug/m3	0.19 J	110 J	ND(4.3){0.87} [1.2 J]	ND(3.9){1.1} [ND(4){1.1}]	0.088 J [ND(0.73){0.079}]
Heptane	180	ug/m3	0.66 J	360 J	2 J [3.1 J]	ND(3.7){1.2} [ND(3.8){1.2}]	NA
Iodomethane	--	ug/m3	NA	ND(580){120}	ND(5.8){1.2} [ND(5.8){1.2}]	NA	NA
Isocotane	--	ug/m3	0.17 J	ND(470){93}	ND(4.7){0.93} [ND(4.7){0.93}]	ND(4.2){0.33} [ND(4.3){0.33}]	NA
Isopropyl alcohol	88	ug/m3	1.8 J	2,000	1.4 J [ND(2.5){1.2}]	1.9 J [0.96 J]	NA
Isopropylbenzene	180	ug/m3	ND(0.98){0.15}	ND(490){98}	ND(4.9){0.98} [ND(4.9){0.98}]	ND(4.4){0.88} [ND(4.5){0.9}]	NA
m&p-Xylene	--	ug/m3	NA	170 J	1.9 J [2.9 J]	1.3 J [1.2 J]	0.53 J [0.27 J]
Methyl Acrylate	8.8	ug/m3	NA	ND(350){70}	ND(3.5){0.7} [ND(3.5){0.7}]	NA	NA
Methyl Methacrylate	310	ug/m3	ND(2){0.053}	1,700	ND(4.1){0.82} [ND(4.1){0.82}]	ND(37){37} [ND(38){38}]	NA
Methyl tert-butyl ether	47	ug/m3	ND(0.72){0.058}	ND(360){72}	ND(3.6){0.72} [ND(3.6){0.72}]	ND(3.3){0.44} [ND(3.3){0.45}]	ND(0.61){0.073} [ND(0.6){0.072}]
Methylene Chloride	260	ug/m3	1.3 J	970	4 [3.6]	ND(31){1.6} [ND(32){1.6}]	NA
n-Butane	--	ug/m3	2.4	NA	NA	NA	NA
n-Butyl Acetate	--	ug/m3	NA	ND(0){0}	ND(23.75) [ND(23.75)]	ND(43){43} [ND(44){44}]	NA
n-Butylbenzene	--	ug/m3	ND(1.1){0.3}	NA	NA	NA	NA
n-Hexane	310	ug/m3	16	280 J	4.8 [4.5]	2.3 J [2.2 J]	6 [5.8]
n-Octane	--	ug/m3	NA	210 J	ND(4.7){0.93} [ND(4.7){0.93}]	ND(17){17} [ND(17){17}]	NA
Nonane	8.8	ug/m3	NA	ND(0){0}	ND(26.23) [ND(26.23)]	ND(19){19} [ND(19){19}]	NA
n-Propylbenzene	440	ug/m3	ND(0.98){0.25}	ND(490){98}	ND(4.9){0.98} [ND(4.9){0.98}]	ND(4.4){0.67} [ND(4.5){0.68}]	NA
o-Xylene	44	ug/m3	NA	ND(430){87}	1.2 J [1.7 J]	ND(3.9){0.81} [ND(4){0.82}]	0.17 J [0.14 J]
Pentane	440	ug/m3	NA	720	85 [79]	NA	NA
p-Isopropyltoluene	--	ug/m3	ND(1.1){0.26}	NA	NA	NA	NA
Propene	1,300	ug/m3	NA	250	5 [4.7]	ND(6.2){1.2} [ND(6.3){1.2}]	NA
sec-Butylbenzene	--	ug/m3	ND(1.1){0.26}	NA	NA	NA	NA
Styrene	440	ug/m3	ND(0.85){0.13}	300 J	ND(4.3){0.85} [ND(4.3){0.85}]	ND(3.8){1} [ND(3.9){1}]	NA

Table 6
Cumulative Summary of Indoor Air Data for Building 59

Indoor Air Investigation and Assessment Summary Report for Building 59 – Summer 2017

Groundwater Management Area 3

General Electric Company - Pittsfield, Massachusetts

(Results are presented in ug/m3)

Location ID: Date Collected: Sample Name:	VISL 2017 Indoor Air THQ = 0.1	Units	Lobby Area 10/20/11 59-IA-3	Lobby Area 10/25/12 59-IA-3	Lobby Area 01/08/13 59-IA-3	Lobby Area 03/12/14 59-IA-3	Lobby Area 03/31/15 59-IA-3
Volatile Organics							
tert-Butylbenzene	--	ug/m3	ND(1.1){0.26}	NA	NA	NA	NA
Tertiary butyl alcohol	--	ug/m3	0.48 J	ND(300){150}	ND(3){1.5} [ND(3){1.5}]	NA	NA
Tetrachloroethene	18	ug/m3	0.18 J	ND(680){140}	47 [53]	ND(6.1){1.3} [ND(6.2){1.3}]	0.19 J [ND(1.1){0.14}]
Toluene	2,200	ug/m3	0.98	210 J	2 J [2.3 J]	0.81 J [0.9 J]	0.72 [0.47 J]
trans-1,2-Dichloroethene	--	ug/m3	ND(0.79){0.13}	ND(400){79}	ND(4){0.79} [ND(4){0.79}]	ND(3.6){1} [ND(3.6){1}]	NA
trans-1,3-Dichloropropene	--	ug/m3	ND(0.91){0.091}	ND(450){91}	ND(4.5){0.91} [ND(4.5){0.91}]	ND(4.1){0.98} [ND(4.2){1}]	NA
Trichloroethene	0.88	ug/m3	1.4	ND(540){110}	5.9 [6.8]	7.6 [6.9]	7.3 [7.1]
Trichlorofluoromethane	--	ug/m3	12	120 J	12 [12]	12 [14]	12 [12]
Vinyl Acetate	88	ug/m3	NA	ND(350){180}	ND(3.5){3.5} [ND(3.5){3.5}]	ND(13){3.2} [ND(13){3.3}]	NA
Vinyl Chloride	2.8	ug/m3	ND(0.51){0.074}	ND(260){51}	ND(2.6){0.51} [ND(2.6){0.51}]	ND(2.3){0.47} [ND(2.4){0.47}]	NA
Xylenes (total)	44	ug/m3	0.66 J	NA	NA	NA	NA
Semivolatile Organics							
1,2,4-Trichlorobenzene	0.88	ug/m3	ND(3.7 J){0.37}	ND(1,500){370}	ND(15){3.7} [ND(15){3.7}]	5.6 J [ND(27){3.9}]	ND(6.3){0.38} [ND(6.2){0.38}]
1,2-Dichlorobenzene	88	ug/m3	ND(1.2){0.29}	ND(600){120}	ND(6){1.2} [ND(6){1.2}]	ND(5.4){1.1} [ND(5.5){1.1}]	NA
1,3-Dichlorobenzene	--	ug/m3	ND(1.2){0.26}	ND(600){120}	ND(6){1.2} [ND(6){1.2}]	ND(5.4){0.88} [ND(5.5){0.89}]	NA
1,4-Dichlorobenzene	1.1	ug/m3	ND(1.2){0.26}	ND(600){120}	ND(6){1.2} [ND(6){1.2}]	ND(5.4){1.1} [ND(5.5){1.1}]	ND(1){0.2} [ND(1){0.2}]
Benzyl Chloride	0.25	ug/m3	ND(1){0.24}	ND(520){260}	ND(5.2){2.6} [ND(5.2){2.6}]	ND(4.7){0.66} [ND(4.8){0.67}]	NA
Hexachlorobutadiene	0.56	ug/m3	ND(2.1){0.69}	ND(2,100){430}	ND(21 J){4.3} [ND(21 J){4.3}]	10 J [ND(39){6.8}]	ND(9.1){0.33} [ND(9){0.33}]
Hexachloroethane	1.1	ug/m3	NA	ND(970){190}	ND(9.7){1.9} [ND(9.7){1.9}]	NA	NA
Naphthalene	0.36	ug/m3	ND(2.6 J){0.45}	ND(1,000){210}	ND(10){2.1} [ND(10){2.1}]	ND(19){0.39} [ND(19){0.39}]	0.17 J [0.11 J]
Tetrahydrofuran	880	ug/m3	1.1 J	ND(290){59}	ND(2.9){0.59} [ND(2.9){0.59}]	ND(2.7){0.46} [ND(2.7){0.46}]	NA

Table 6
Cumulative Summary of Indoor Air Data for Building 59

Indoor Air Investigation and Assessment Summary Report for Building 59 – Summer 2017

Groundwater Management Area 3

General Electric Company - Pittsfield, Massachusetts

(Results are presented in ug/m3)

Location ID: Date Collected: Sample Name:	VISL 2017 Indoor Air THQ = 0.1	Units	Lobby Area 03/16/16 59-IA-3	Lobby Area 08/24/16 59-IA-3	Lobby Area 03/17/17 59-IA-3	Lobby Area 09/01/17 59-IA-3
Volatile Organics						
1,1,1,2-Tetrachloroethane	1.7	ug/m3	NA	NA	NA	NA
1,1,1-Trichloroethane	2,200	ug/m3	NA	NA	NA	NA
1,1,2,2-Tetrachloroethane	0.21	ug/m3	ND(1.2){0.16}	ND(1.1){0.15}	ND(1.2){0.27}	ND(1.1){0.23} [ND(1.3){0.27}]
1,1,2-trichloro-1,2,2-trifluoroethane	2,200	ug/m3	NA	NA	NA	NA
1,1,2-Trichloroethane	0.088	ug/m3	NA	NA	NA	NA
1,1-Dichloroethane	7.7	ug/m3	NA	NA	NA	NA
1,1-Dichloroethene	88	ug/m3	NA	NA	NA	NA
1,2,3-Trichloropropane	0.13	ug/m3	ND(5.2){1}	ND(4.9){0.98}	ND(5.1){0.4}	ND(4.9){1.2} [ND(5.6){1.4}]
1,2,4-Trimethylbenzene	26	ug/m3	ND(0.84){0.19}	0.18 J	ND(0.83){0.16}	0.16 J [0.21 J]
1,2-Dibromo-3-chloropropane	0.002	ug/m3	NA	NA	NA	NA
1,2-Dibromoethane	0.02	ug/m3	NA	NA	NA	NA
1,2-Dichloro-1,1,2,2-tetrafluoroethane	--	ug/m3	NA	NA	NA	NA
1,2-Dichloroethane	0.47	ug/m3	NA	NA	NA	NA
1,2-Dichloroethene (total)	--	ug/m3	NA	NA	NA	NA
1,2-Dichloropropane	1.8	ug/m3	NA	NA	NA	NA
1,3,5-Trimethylbenzene	--	ug/m3	NA	NA	NA	NA
1,3-Butadiene	0.41	ug/m3	NA	NA	NA	NA
1,4-Dioxane	2.5	ug/m3	NA	NA	NA	NA
2-Butanone	2,200	ug/m3	NA	NA	NA	NA
2-Chlorotoluene	--	ug/m3	NA	NA	NA	NA
2-Hexanone	13	ug/m3	NA	NA	NA	NA
3-Chloropropene	0.44	ug/m3	NA	NA	NA	NA
4-Ethyltoluene	--	ug/m3	NA	NA	NA	NA
4-Methyl-2-pentanone	1,300	ug/m3	NA	NA	NA	NA
Acetone	14,000	ug/m3	NA	NA	NA	NA
Acetonitrile	26	ug/m3	ND(1.4){1.4}	ND(1.4){1.4}	ND(1.4){1.4}	ND(1.4){0} [ND(1.6){0}]
Acrolein	0.0088	ug/m3	2 J	4	ND(2.2){2.2}	ND(1.8){0} [ND(2.1){0}]
Acrylonitrile	0.18	ug/m3	NA	NA	NA	NA
Alpha Methyl Styrene	--	ug/m3	NA	NA	NA	NA
alpha-Pinene	--	ug/m3	NA	NA	NA	NA
Benzene	1.6	ug/m3	0.62	0.23 J	ND(0.54){0.09}	0.24 J [0.21 J]
Bromobenzene	26	ug/m3	NA	NA	NA	NA
Bromodichloromethane	0.33	ug/m3	NA	NA	NA	NA
Bromoethene	0.38	ug/m3	NA	NA	NA	NA
Bromoform	11	ug/m3	NA	NA	NA	NA
Bromomethane	2.2	ug/m3	ND(3.3){0.56}	ND(3.2){0.54}	ND(3.3){0.45}	ND(3.1){0.58} [ND(3.6){0.67}]
Carbon Disulfide	310	ug/m3	ND(2.7){0.73}	ND(2.5){0.69}	ND(2.6){0.45}	ND(2.5){0.28} [ND(2.9){0.32}]
Carbon Tetrachloride	2	ug/m3	NA	NA	NA	NA
Chlorobenzene	22	ug/m3	NA	NA	NA	NA

Table 6
Cumulative Summary of Indoor Air Data for Building 59

Indoor Air Investigation and Assessment Summary Report for Building 59 – Summer 2017

Groundwater Management Area 3

General Electric Company - Pittsfield, Massachusetts

(Results are presented in ug/m3)

Location ID: Date Collected: Sample Name:	VISL 2017 Indoor Air_THQ = 0.1	Units	Lobby Area 03/16/16 59-1A-3	Lobby Area 08/24/16 59-1A-3	Lobby Area 03/17/17 59-1A-3	Lobby Area 09/01/17 59-1A-3
Volatile Organics						
Chlorodifluoromethane	22,000	ug/m3	NA	NA	NA	NA
Chloroethane	4,400	ug/m3	NA	NA	NA	NA
Chloroform	0.53	ug/m3	ND(0.83){0.34}	ND(0.8){0.32}	0.22 J	ND(0.79){0.19} [ND(0.91){0.22}]
Chloromethane	39	ug/m3	NA	NA	NA	NA
cis-1,2-Dichloroethene	--	ug/m3	NA	NA	NA	NA
cis-1,3-Dichloropropene	--	ug/m3	NA	NA	NA	NA
Cyclohexane	2,600	ug/m3	NA	NA	NA	NA
Dibromochloromethane	--	ug/m3	NA	NA	NA	NA
Dibromomethane	1.8	ug/m3	NA	NA	NA	NA
Dichlorodifluoromethane	44	ug/m3	NA	NA	NA	NA
Dichlorofluoromethane	--	ug/m3	NA	NA	NA	NA
d-Limonene	--	ug/m3	NA	NA	NA	NA
Ethanol	--	ug/m3	NA	NA	NA	NA
Ethyl acetate	31	ug/m3	ND(3.1){3.1}	ND(2.9){2.9}	ND(3){3}	ND(2.9){0.99} [ND(3.4){1.1}]
Ethyl Acrylate	3.5	ug/m3	NA	NA	NA	NA
Ethyl Methacrylate	130	ug/m3	NA	NA	NA	NA
Ethylbenzene	4.9	ug/m3	ND(0.74){0.2}	ND(0.71){0.19}	ND(0.73){0.21}	ND(0.7){0.12} [ND(0.81){0.14}]
Heptane	180	ug/m3	NA	NA	NA	NA
Iodomethane	--	ug/m3	NA	NA	NA	NA
Isooctane	--	ug/m3	NA	NA	NA	NA
Isopropyl alcohol	88	ug/m3	NA	NA	NA	NA
Isopropylbenzene	180	ug/m3	NA	NA	NA	NA
m&p-Xylene	--	ug/m3	0.31 J	0.59 J	0.3 J	0.34 J [0.31 J]
Methyl Acrylate	8.8	ug/m3	NA	NA	NA	NA
Methyl Methacrylate	310	ug/m3	NA	NA	NA	NA
Methyl tert-butyl ether	47	ug/m3	ND(0.62){0.16}	ND(0.59){0.16}	ND(0.61){0.12}	ND(0.58){0.18} [ND(0.67){0.21}]
Methylene Chloride	260	ug/m3	NA	NA	NA	NA
n-Butane	--	ug/m3	NA	NA	NA	NA
n-Butyl Acetate	--	ug/m3	NA	NA	NA	NA
n-Butylbenzene	--	ug/m3	NA	NA	NA	NA
n-Hexane	310	ug/m3	ND(1.6){0.33}	1 J	2.2	1.9 [2.1]
n-Octane	--	ug/m3	NA	NA	NA	NA
Nonane	8.8	ug/m3	NA	NA	NA	NA
n-Propylbenzene	440	ug/m3	NA	NA	NA	NA
o-Xylene	44	ug/m3	ND(0.74){0.17}	0.21 J	ND(0.73){0.095}	ND(0.7){0.18} [ND(0.81){0.21}]
Pentane	440	ug/m3	NA	NA	NA	NA
p-Isopropyltoluene	--	ug/m3	NA	NA	NA	NA
Propene	1,300	ug/m3	NA	NA	NA	NA
sec-Butylbenzene	--	ug/m3	NA	NA	NA	NA
Styrene	440	ug/m3	NA	NA	NA	NA

Table 6
Cumulative Summary of Indoor Air Data for Building 59

Indoor Air Investigation and Assessment Summary Report for Building 59 – Summer 2017

Groundwater Management Area 3

General Electric Company - Pittsfield, Massachusetts

(Results are presented in ug/m3)

Location ID: Date Collected: Sample Name:	VISL 2017 Indoor Air_THQ = 0.1	Units	Lobby Area 03/16/16 59-IA-3	Lobby Area 08/24/16 59-IA-3	Lobby Area 03/17/17 59-IA-3	Lobby Area 09/01/17 59-IA-3
Volatile Organics						
tert-Butylbenzene	--	ug/m3	NA	NA	NA	NA
Tertiary butyl alcohol	--	ug/m3	NA	NA	NA	NA
Tetrachloroethene	18	ug/m3	0.45 J	ND(1.1){0.17}	ND(1.1){0.55}	ND(1.1){0.26} [ND(1.3){0.3}]
Toluene	2,200	ug/m3	1.8	1.7	0.99	3.4 [4.2]
trans-1,2-Dichloroethene	--	ug/m3	NA	NA	NA	NA
trans-1,3-Dichloropropene	--	ug/m3	NA	NA	NA	NA
Trichloroethene	0.88	ug/m3	1.4	0.3 J	0.23 J	0.3 J [ND(1){0.29}]
Trichlorofluoromethane	--	ug/m3	13	33	5.3	22 [27]
Vinyl Acetate	88	ug/m3	NA	NA	NA	NA
Vinyl Chloride	2.8	ug/m3	NA	NA	NA	NA
Xylenes (total)	44	ug/m3	NA	NA	NA	NA
Semivolatile Organics						
1,2,4-Trichlorobenzene	0.88	ug/m3	ND(6.3){0.52}	ND(6){0.5}	ND(6.3){0.39}	ND(6){0.3} [ND(6.9){0.34}]
1,2-Dichlorobenzene	88	ug/m3	NA	NA	NA	NA
1,3-Dichlorobenzene	--	ug/m3	NA	NA	NA	NA
1,4-Dichlorobenzene	1.1	ug/m3	ND(1){0.18}	ND(0.98){0.17}	ND(1){0.22}	0.36 J [0.42 J]
Benzyl Chloride	0.25	ug/m3	NA	NA	NA	NA
Hexachlorobutadiene	0.56	ug/m3	ND(9.1){0.59}	ND(8.7){0.56}	ND(9){0.54}	ND(8.6){1.4} [ND(10){1.6}]
Hexachloroethane	1.1	ug/m3	NA	NA	NA	NA
Naphthalene	0.36	ug/m3	ND(4.5){0.17}	0.36 J	ND(4.4){0.14}	ND(4.2){0.21} [ND(4.9){0.24}]
Tetrahydrofuran	880	ug/m3	NA	NA	NA	NA

Table 7
Summary of TCE Concentrations in Indoor Air in Building 59 Using Post-Mitigation Data

Indoor Air Investigation and Assessment Summary Report for Building 59 – Summer 2017
Groundwater Management Area 3
General Electric Company – Pittsfield, Massachusetts

Sample Identification		Building 59 (µg/m³)			
		Result	RL	MDL	Value Used
59-IA-1	3/16/2016	1.2	--	--	1.2
	8/24/2016	2.5	--	--	2.5
	3/17/2017	1.7	--	--	1.7
	9/1/2017	0.57 J	--	--	0.57
Location Mean					1.5
59-IA-2	3/16/2016	0.94 [1.1]	--	--	1.0
	8/24/2016	1.3 [1.2]	--	--	1.3
	3/17/2017	1.4 [1.5]	--	--	1.5
	9/1/2017	1	--	--	1
Location Mean					1.2
59-IA-3	3/16/2016	1.4	--	--	1.4
	8/24/2016	0.3 J	--	--	0.3
	3/17/2017	0.23 J	--	--	0.23
	9/1/2017	0.3 J [ND]	-- [1]	-- [0.29]	0.30
Location Mean					0.56
Building Mean					1.1

Notes:

59-IA-1: Facility Area
59-IA-2: Library Area
59-IA-3: Lobby Area

J = estimated concentration
MDL = method detection limit
ND = non-detect

RL = reporting limit
µg/m³ = micrograms per cubic meter

Field duplicate sample results are presented in brackets.

Table 8
Risk Calculations for TCE in Building 59 Using Average Post-Mitigation Data

Indoor Air Investigation and Assessment Summary Report for Building 59 – Summer 2017
Groundwater Management Area 3
General Electric Company – Pittsfield, Massachusetts

Building 59														
Constituent	Commercial Indoor Air VISL ¹		Average Indoor Air Concentration (µg/m ³)				Estimated Cancer Risk ²				Estimated Non-Cancer Hazard ³			
	CR=1E-06	HQ =1	59-IA-1	59-IA-2	59-IA-3	Bldg	59-IA-1	59-IA-2	59-IA-3	Bldg	59-IA-1	59-IA-2	59-IA-3	Bldg
Trichloroethene	3.0	8.8	1.5	1.2	0.56	1.1	5E-07	4E-07	2E-07	4E-07	0.17	0.14	0.064	0.13
Cumulative for building (rounded):							5E-07	4E-07	2E-07	4E-07	0.2	0.1	0.06	0.1

Notes:

1. In accordance with EPA's conditional approval letter dated September 12, 2013, the indoor air vapor intrusion screening levels (VISLs) used in this evaluation for trichloroethene are EPA's commercial indoor air VISLs based on an excess cancer risk (CR) level of 1×10^{-6} and a non-cancer hazard quotient (HQ) of 1.
2. Estimated cancer risks from each constituent were calculated as follows:

$$\text{Cancer Risk} = \left(\frac{\text{Average Indoor Air Concentration}}{\text{Cancer - Based VISL}} \right) (1 \times 10^{-6})$$

Cancer risks for each constituent were then summed to determine the total cancer risk.

3. Estimated non-cancer hazards from each constituent were calculated as follows:

$$\text{Non - Cancer Hazard} = \frac{\text{Average Indoor Air Concentration}}{\text{Non - Cancer - Based VISL}}$$

Non-cancer hazard quotients for each constituent were then summed to determine the total hazard index.

VISL = Vapor Intrusion Screening Level
 CR = cancer risk level
 HQ = hazard quotient
 Bldg = building-wide
 µg/m³ = micrograms per cubic meter

Table 9
Risk Calculations for TCE in Building 59 Using September 2017 Data

Indoor Air Investigation and Assessment Summary Report for Building 59 – Summer 2017
Groundwater Management Area 3
General Electric Company – Pittsfield, Massachusetts

Building 59														
Constituent	Commercial Indoor Air VISL ¹		March 2017 Indoor Air Concentration (µg/m ³)				Estimated Cancer Risk ²				Estimated Non-Cancer Hazard ³			
	CR=1E-06	HQ =1	59-IA-1	59-IA-2	59-IA-3	Bldg	59-IA-1	59-IA-2	59-IA-3	Bldg	59-IA-1	59-IA-2	59-IA-3	Bldg
Trichloroethene	3.0	8.8	0.57	1.0	0.30	0.62	2E-07	3E-07	1E-07	2E-07	0.065	0.11	0.034	0.071
Cumulative for building (rounded):							2E-07	3E-07	1E-07	2E-07	0.06	0.1	0.03	0.7

Notes:

1. In accordance with EPA's conditional approval letter dated September 12, 2013, the indoor air vapor intrusion screening levels (VISLs) used in this evaluation for trichloroethene are EPA's commercial indoor air VISLs based on an excess cancer risk (CR) level of 1×10^{-6} and a non-cancer hazard quotient (HQ) of 1.
2. Estimated cancer risks from each constituent were calculated as follows:

$$\text{Cancer Risk} = \left(\frac{\text{Average Indoor Air Concentration}}{\text{Cancer - Based VISL}} \right) (1 \times 10^{-6})$$

Cancer risks for each constituent were then summed to determine the total cancer risk.

3. Estimated non-cancer hazards from each constituent were calculated as follows:

$$\text{Non - Cancer Hazard} = \frac{\text{Average Indoor Air Concentration}}{\text{Non - Cancer - Based VISL}}$$

Non-cancer hazard quotients for each constituent were then summed to determine the total hazard index.

VISL = Vapor Intrusion Screening Level

CR = cancer risk level

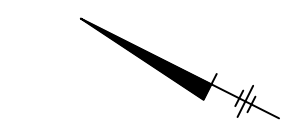
HQ = hazard quotient

Bldg = building-wide

µg/m³ = micrograms per cubic meter

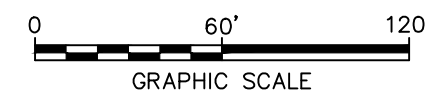
FIGURES





SG-51E	◇	AUGUST 2006 DEEP SOIL GAS SAMPLE LOCATION
51-8	●	AUGUST 2006 GROUNDWATER/ LNAPL SAMPLE LOCATION
# 0511	✦	SEPTEMBER 2006 SUB-SLAB SOIL GAS SAMPLE LOCATION
# 0200	▲	SEPTEMBER 2006 INDOOR AIR SAMPLE LOCATION
# 5902	■	SEPTEMBER 2006 INDUSTRIAL HYGIENE INDOOR AIR SAMPLE LOCATION
51-SS-3	✦	2007-2017 SUB-SLAB SOIL GAS SAMPLE LOCATION
51-IA-3	▲	2007-2017 INDOOR AIR SAMPLE LOCATION

1. FIGURE IS BASED ON PHOTOGRAPHIC MAPPING BY LOCKWOOD MAPPING, INC.—FLOWN IN APRIL 1990 AND DATA PROVIDED BY GENERAL ELECTRIC COMPANY.
2. NOT ALL PHYSICAL FEATURES SHOWN.
3. SITE BOUNDARIES, SAMPLE AND BUILDING LOCATIONS ARE APPROXIMATE.
4. PERMANENT SUB—SLAB SAMPLE POINTS WERE INSTALLED AT EACH OF THE "SS" LOCATIONS AT BUILDING 51 AND 59 IN OCTOBER 2012.



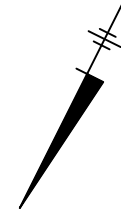
GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS
INDOOR AIR INVESTIGATION AND ASSESSMENT SUMMARY
REPORT FOR BUILDINGS 51 AND 59 - Winter 2017

HISTORICAL AND EXISTING SUB-SLAB SOIL GAS AND INDOOR AIR SAMPLING LOCATIONS



FIGURE
1

PLASTICS AVE.



59-1A-2 ▲ 2007-2017 INDOOR
59-SS-2 ▲ AIR/SUB-SLAB SAMPLE
LOCATION

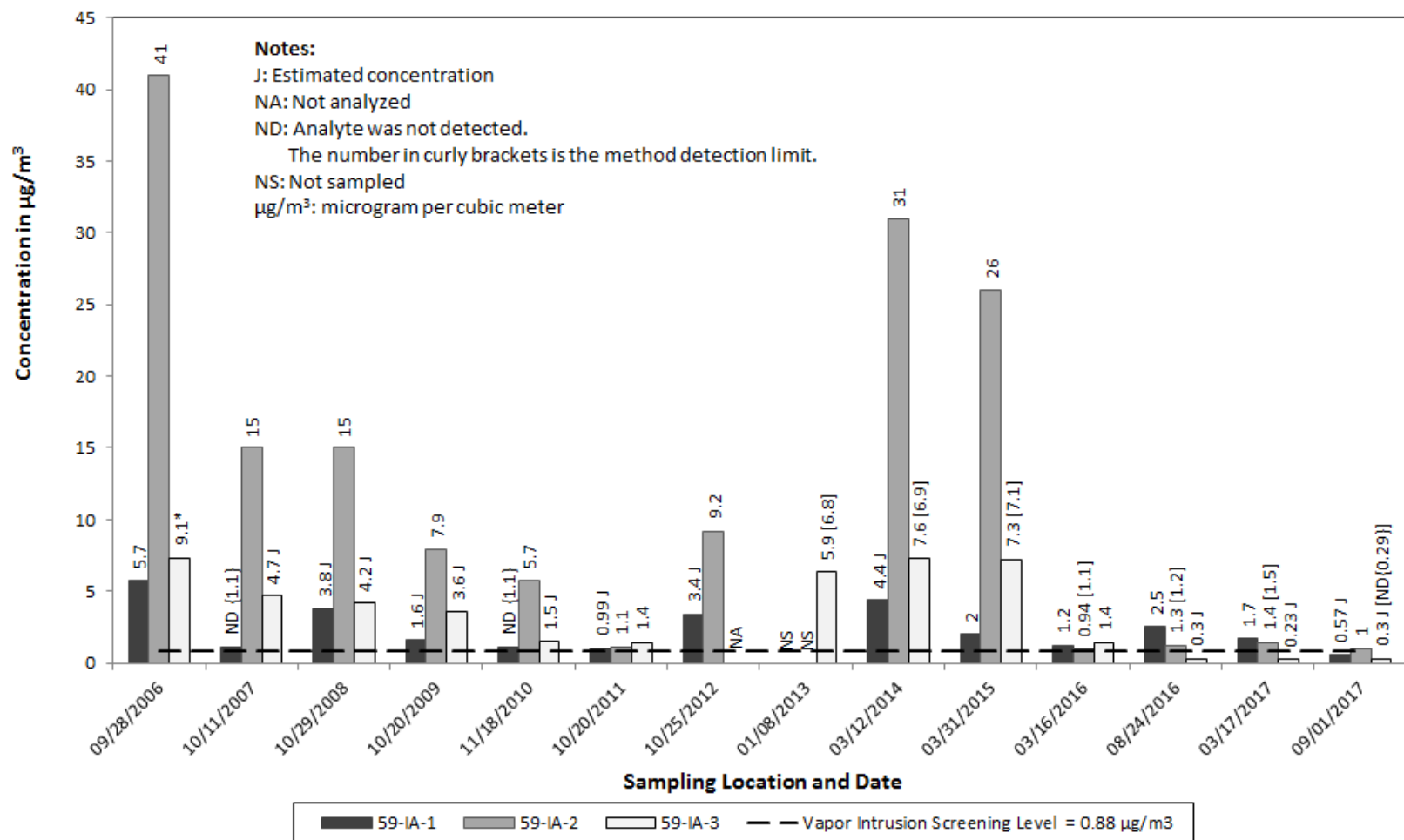
[DUP-031717] ▲ DUPLICATE SAMPLE

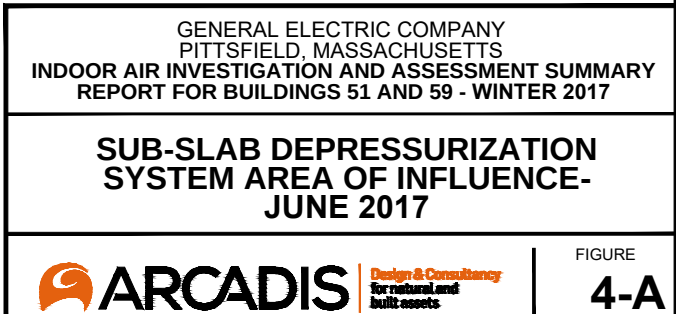
PLASTICS AVE.

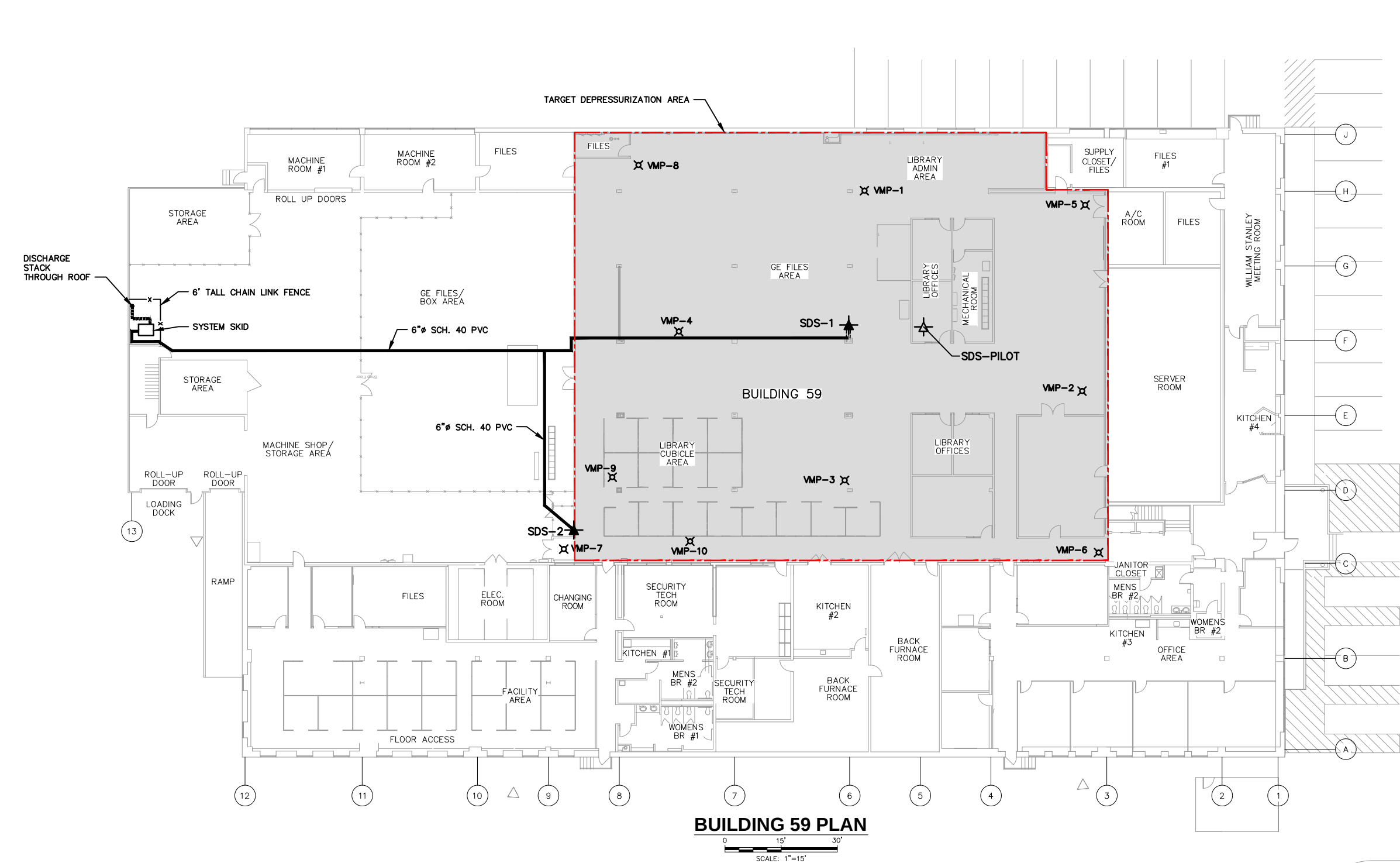
0 30' 60'

GRAPHIC SCALE

FIGURE
2







- LEGEND:**
- PILOT TEST SSD EXTRACTION POINT (DECOMMISSIONED)
 - SSD SYSTEM EXTRACTION POINT
 - SSD MONITORING POINT
 - SUB-SLAB SSD EXTRACTION PIPING
 - OVERHEAD SSD EXTRACTION PIPING
 - SSD SYSTEM DISCHARGE PIPING
 - TARGET DEPRESSURIZATION AREA
 - COLUMN LINE DESIGNATION

DIFFERENTIAL PRESSURE READINGS SEPTEMBER 1, 2017	
Vacuum Monitoring Point	Differential Pressure (in w.c.)
VMP-1	-0.177
VMP-2	-0.193
VMP-3	-0.365
VMP-4	-0.006
VMP-5	-0.013
VMP-6	-0.078
VMP-7	-0.497
VMP-8	-0.046
VMP-9	-0.054
VMP-10	-0.026

- NOTES:**
- FIGURE IS BASED ON PHOTOGRAPHIC MAPPING BY LOCKWOOD MAPPING, INC.—FLOWN IN APRIL 1990 AND DATA PROVIDED BY GENERAL ELECTRIC COMPANY.
 - NOT ALL PHYSICAL FEATURES SHOWN.
 - ALL LOCATIONS ARE APPROXIMATE.

ATTACHMENT A

Summary of Material/Products Inventory for Building 59



Table A-1
Summary of Material/Product Inventory For Building 59
Indoor Air Investigation and Assessment Summary for Building 59 - Summer 2017
General Electric Company - Pittsfield, Massachusetts

Area	Identified Material/Product	Information Regarding Chemicals in Material/Product	2017 Date	2017 Background PID	Size	2017 # OF Units	Opened(O) Un-Opended (UO)
Arcadis Cage	3M Super 77 Adhesive (4.4 oz)	N.J.T.S. Reg No. 04499600-5776P, 2-Methylpentane, 3-Methylpentane, 2,3-Dimethylbutane, Neohehexane, Pentane, Cyclohexane, Isobutane, Propane, Dimethyl ether, Hexane ³	8/31/2017	0	4.4 oz	1	O
Arcadis Cage	ACROS Organics Sodium Thiosulfate	0.1 N Standard Solution	8/31/2017	0	1 L	1	O
Arcadis Cage	Advance Auto Parts Glass Cleaner	No information ⁴	8/31/2017	0	21.6 oz	1	O
Arcadis Cage	Arnold Bar and Chain Lube 1 unit (20oz.)	Contains oil (virgin)	8/31/2017	0	20 oz	1	O
Arcadis Cage	Comet Deodorizing Cleanser	Calcium carbonate, Sodium carbonate, Calcium hydroxide, Sodium dichloro-s-triazinetriane dihydrate	8/31/2017	0	21 oz	2	O/U
Arcadis Cage	CRC Jump Start Fluid (1 unit) (11 oz.)	Contains diethyl, Ether, Heptane, Lubricant, and Carbon dioxide	8/31/2017	0	11 oz	1	O
Arcadis Cage	Febreeze (1 unit)	Water, Ethyl alcohol (27 oz) ³	8/31/2017	0	27 oz	1	O
Arcadis Cage	Gas Generator	Gasoline 4000W & 2500 W	8/31/2017	0	~2 Gal	2	O
Arcadis Cage	Gas recepticle	1 empty	8/31/2017	0	58 L	1	O
Arcadis Cage	Geotech standards	pH, 4, 7, and 10; Conductivity 1413 uS/cm, ORP	8/31/2017	0	4 - 500ml & 1 - 250 ml	5	O
Arcadis Cage	Great Value Bleach (64 fl oz)	Opened - Sodium hypochlorite, Sodium hydroxide ³	8/31/2017	0	64 oz	1	O
Arcadis Cage	Hanna Instruments HI7021 ORP Solution for Platium and Gold Electrodes	Di-sodium hydrogen phosphate	8/31/2017	0	500 mL	1	O
Arcadis Cage	Hercules PVC Primer (1 unit)	Tetrahydrofuran, Methyl ethyl ketone, Cyclohexanone, Acetone (8 oz) ³	8/31/2017	0	8 oz	1	O

Table A-1
Summary of Material/Product Inventory For Building 59
Indoor Air Investigation and Assessment Summary for Building 59 - Summer 2017
General Electric Company - Pittsfield, Massachusetts

Area	Identified Material/Product	Information Regarding Chemicals in Material/Product	2017 Date	2017 Background PID	Size	2017 # OF Units	Opened(O) Un-Opended (UO)
Arcadis Cage	Honda Engine Oil (1 unit)	Contains motor oil - 10W-30 (32 oz.)	8/31/2017	0	32 oz	1	0
Arcadis Cage	Invisible Glass Spray - Stoner	Hydrocarbon Blend ³	8/31/2017	0	22 oz	1	O
Arcadis Cage	Isobutylene Gas (3 units)	Isobutylene 100 ppm	8/31/2017	0	1-34 L Gas & 2 - 100 L Gas	3	O
Arcadis Cage	Liquid Wrench Lubricating Oil	Distillates (petroleum), Hydrotreated Heavy Naphtheni, 2-(2-butoxyethoxy) Ethanol, Low Odor Base Solvent, Naphtha (petroleum), Hydrotreated Heavy, Solvent Naphtha (petroleum), Medium Aliph., Stoddard Solvent, Carbon Dioxide, Napthalene, Nonane, Methyl-Benzene, 1-methylethyl-benzene, Ethylbenzene , Hexane	8/31/2017	0	11 oz	1	O
Arcadis Cage	Liquid Wrench Penetrating Oil	Petroleum oil, Petroleum distillate, Graphite dispersion, Carbon dioxide	8/31/2017	0	4 oz	1	O
Arcadis Cage	Lysol Disinfectant Wipes	Ethyl alcohol ³	8/31/2017	0	20.3 oz	1	O
Arcadis Cage	Methane/Air Mix (2 units)	Methane, Air	8/31/2017	0	1-100 L & 1- 103 L	2	O
Arcadis Cage	Oatey PVC Primer	Tetrahydrofuran, Methyl ethyl ketone, Cyclohexanone, Acetone (8 oz) ³	8/31/2017	0	8 oz	1	O
Arcadis Cage	Off Insect Repellant Deep Woods	Deet 25%	8/31/2017	0	9 oz	1	O
Arcadis Cage	Pine YSI Calibration Solution	pH, 4, 7, and 10; Conductivity 1413 uS/cm, ORP	8/31/2017	0	1 L	1	O
Arcadis Cage	Plastic Container	2% Starch Solution	8/31/2017	0	60 ml	1	O
Arcadis Cage	Plastic Container	Acetic Acid Solution 1 Molar	8/31/2017	0	250 ml	6	O
Arcadis Cage	Prestone Power Steering Fluid	Highly Refined Petroleum Oils, Alkoxy Sulfolane, Zinc Compounds, Proprietary Additive	8/31/2017	0	32 oz	1	O

Table A-1
Summary of Material/Product Inventory For Building 59
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General Electric Company - Pittsfield, Massachusetts

Area	Identified Material/Product	Information Regarding Chemicals in Material/Product	2017 Date	2017 Background PID	Size	2017 # OF Units	Opened(O) Un-Opended (UO)
Arcadis Cage	RadioShack Electronics Cleaner (1 unit)	Isohexane, Carbon dioxide, Ethanol	8/31/2017	0	5.5 oz	1	O
Arcadis Cage	Rust-oleum marking paint (17 oz)	Liquefied petroleum gas, Acetone, Toluene, Aliphatic hydrocarbon, Xylene, Titanium dioxide, N-butyl acetate, Aliphatic petroleum distillates, Naphtha , Magnesium silicate, Ethylbenzene , Aluminum flake, Pigment black 7, Calcined aluminum silicate, Pigment red 122, Microcrystalline silica ³	8/31/2017	0	2 - 15oz & 1 - 17 oz	1	O
Arcadis Cage	Rustoleum Fluorescent Glass Enamel (14 oz)	Liquefied Petroleum Gas, Acetone, N-butyl acetate, Toluene, Solvent Naphtha , Light Aromatic, 1,2,4-Trimethylbenzene ³	8/31/2017	0	14 oz	1	O
Arcadis Cage	Scotchgard Auto Fabric & Carpet Protector	Acetone, Trade Secret, Isopropyl Alcohol, Light Alkylate Petroleum Naphtha , Carbon Dioxide, Fluorochemical Urethane ³	8/31/2017	0	17.5 oz	1	O
Arcadis Cage	Sigma-Aldrich Hexane	Hexane	8/31/2017	23.7 ppb	4L	1	O
Arcadis Cage	Sigma-Aldrich Methanol, Anhydrous (1 unit)	Methanol, Anhydrous (2 L)	8/31/2017	23.7 ppb	2L	1	O
Arcadis Cage	Unigard Washer Fluid	Methyl alcohol	8/31/2017	0	1 gallon	1	O
Arcadis Cage	WD40	Aliphatic hydrocarbon, Petroleum base oil, LVP aliphatic hydrocarbon, Carbon dioxide, Surfactant, Non-haz ingredients. 16 oz, 8 oz	8/31/2017	0	16 oz, 8 oz, & 5.5 oz	3	O
Arcadis Cage	YSI 6073 Turbidity standard	CAS 9003-70-7	8/31/2017	0	1 gallon	1	O
Back Furnace Room	GoJo Natural Pumice Hand Cleaner (1 unit)	No hazardous ingredients, D-limonene ³	8/31/2017	0	1 gallon	1	O
Back Furnace Room	Lysol Foam Cleaner (1 unit)	Ectyl decyl dimethyl ammonium chloride, dioctyl dimethyl ammonium chloride, didecyl dimethyl ammonium chloride (24 oz)	8/31/2017	0	24 oz	2	O
Back Furnace Room	Megaloc Multi-Purpose Thread Servant	All ingredients non-hazardous	8/31/2017	0	8 oz	2	O
Back Furnace Room	Nitrogen Compressed Gas	UN1066 Nitrogen Compressed Gas	8/31/2017	0	4-foot Tall Cylinder	2	UO

Table A-1
Summary of Material/Product Inventory For Building 59
Indoor Air Investigation and Assessment Summary for Building 59 - Summer 2017
General Electric Company - Pittsfield, Massachusetts

Area	Identified Material/Product	Information Regarding Chemicals in Material/Product	2017 Date	2017 Background PID	Size	2017 # OF Units	Opened(O) Un-Opended (UO)
Back Furnace Room	Spartan Xtraction II Soil Extraction Carpet Cleaner	2-butoxyethanol (1 gal)	8/31/2017	0	1 gallon	1	O
Back Furnace Room	Trane Oil 22: Refrigeration Oil	Mineral oil USP (2.5 gal) (6 units)	8/31/2017	0	2.5 gal	5	O
Back Furnace Room	Unidentified	5-gallon bucket labeled Chilled Water Pump Don't Remove from this room.	8/31/2017	0	5 gal	1	O
Back Furnace Room	Waste Oil	Waste Oil 3 gallons	8/31/2017	0	5 gal	1	O
Facility Area	Aero Tac II	Heptane, Acetone, Propane, Dimetyl ether , C12-C16 ethoxylated Alcohols ³	8/31/2017	0	14 0z	1	O
Facility Area	Black Flag Wasp Killer	Deltamethrin, Inert ingredients ³	8/31/2017	0	14 oz	1	O
Facility Area	Comet Deodorizing Cleanser	Calcium carbonate, Sodium carbonate, Calcium hydroxide, Sodium dichloro-s-triazinetrihione dihydrate	8/31/2017	0	21 oz	2	O/U
Facility Area	Clorox Green Works All-Purpose Cleaner (32 fl oz) 2 units	Opened; Alkyl polyglucoside, Ethyl alcohol ³	8/31/2017	0	1 qt	3	O
Facility Area	Cooking spray Stop & Shop	Non-hazardous.	8/31/2017	0	6 oz	1	O
Facility Area	Fantastik All Purpose Cleaner (32 fl oz)	Opened; D-glucopyranoside C9-11 alkyl oligomer, N-Alkyl (60% C14, 30% C16, 5% C12, 5% C18), Dimethyl benzyl, Ammonium chloride, N-alky (68% C14, 32% C16), Dimethyl ethyl benzene ammonium chloride ³	8/31/2017	0	32 oz	1	O
Facility Area	Goo Gone	Citrus and petroleum solvent based stain remover, Proprietary mixture	8/31/2017	0	12 oz	1	O
Facility Area	Great Value Glass Cleaner (1 unit)	Isopropanol, 2-butoxy ethanol, Surfactants, Colorants (32 oz)	8/31/2017	0	32 oz	1	O
Facility Area	Isobutylene Gas (1 units)	Isobutylene 10 ppm	8/31/2017	0	34 L	1	O

Table A-1
Summary of Material/Product Inventory For Building 59
Indoor Air Investigation and Assessment Summary for Building 59 - Summer 2017
General Electric Company - Pittsfield, Massachusetts

Area	Identified Material/Product	Information Regarding Chemicals in Material/Product	2017 Date	2017 Background PID	Size	2017 # OF Units	Opened(O) Un-Opended (UO)
Facility Area	Lift Off 4 Spray Paint and Graffiti Remover	Acetone, Glycol Ether DB ³	8/31/2017	0	22 oz	1	O
Facility Area	Lysol Disinfectant Spray	ethanol, petroleum gases (liquefied, sweetened), quaternary ammonium compounds (benzyl-C12-18-alkyldimethyl, salts with 1,2-benzisothiazol-3(2H)-one 1, 1-dioxide (1:1)) (19 oz) ³	8/31/2017	0	19 oz	2	O
Facility Area	Lysol Disinfectant Spray	Ethanol, petroleum gases (liquefied, sweetened), quaternary ammonium compounds (benzyl-C12-18-alkyldimethyl, salts with 1,2-benzisothiazol-3(2H)-one 1, 1-dioxide (1:1)) (12.5 oz) ³	8/31/2017	0	12.5 oz	1	O
Facility Area	Lysol Foam Cleaner	Diethylene Glycol Monobutyl Ether, Isobutane (24 oz) ³	8/31/2017	0	24 oz	3	O
Facility Area	Lysol Tub and Tile	Ammonia	8/31/2017	0	32 oz	1	O
Facility Area	Ajax Oxygen Bleach Cleanser	Not a hazardous substance or mixture.	8/31/2017	0	21 oz	2	O
Facility Area	Papermate Flair Pen	Water, glycerin (56-81-5), ethylene glycol (107-21-1), dyes, resins, additives	8/31/2017	0	Box of 12	2	O
Facility Area	PMOP Correction Fluid	Titanium dioxide (13463-67-7), solvent naphtha (64742-89-8), mineral spirits (64742-48-9), resins, dispersant, colorants, mustard oil (57-06-7), fragrance	8/31/2017	0	0.6 oz	10	O
Facility Area	PortaCyl and Pine Env. Helium Gas	Helium 99.9%	8/31/2017	0	34 L	3	O
Facility Area	Prestone Windshield De-Icer (2 units) (11 oz.)	Methyl alcohol, Methylene glycol	8/31/2017	0	2 - 11 oz & 1 - 32 oz	3	O
Facility Area	Quality Care Glass Cleaner (1 unit) (33 oz.)	Ammonia	8/31/2017	0	33 oz	1	O
Facility Area	Simple Green All Purpose Cleaner	Water, 2-butoxyethanol, ethoxylated alcohol mixture, tetra potassium pyrophosphate, sodium citrate, fragrance, colorant (32 oz) ³	8/31/2017	0	32 oz	1	O
Facility Area	Spartan Glass Cleaner (1 units)	Water, Isopropyl alcohol (1 gal) ³	8/31/2017	0	1 gal	1	O

Table A-1
Summary of Material/Product Inventory For Building 59
Indoor Air Investigation and Assessment Summary for Building 59 - Summer 2017
General Electric Company - Pittsfield, Massachusetts

Area	Identified Material/Product	Information Regarding Chemicals in Material/Product	2017 Date	2017 Background PID	Size	2017 # OF Units	Opened(O) Un-Opended (UO)
Facility Area	Terro Wasp & Hornet Killer	d-Phenothrin, Tetramethrin, Petroleum distillates ³	8/31/2017	0	1 lb 3oz	1	O
Front Lobby	Lysol Foam Cleaner	Ectyl decyl dimethyl ammonium chloride, dioctyl dimethyl ammonium chloride, didecyl dimethyl ammonium chloride (24 oz)	8/31/2017	0	24 oz	1	O
GE Cage Area	Benjamin Moore Paint	Opened; Titanium dioxide, barium sulfate, nepheline syenite, silica amorphous, carbon black	8/31/2017	0	1 gallon	2	O
GE Cage Area	Hercules Clear Cutting Oil (1 unit)	Petroleum-based lubricating oils, Olefin sulfide metal working fluid additive, 1-decene (sulfurized) (1 gal) ³	8/31/2017	0	1 gal	1	O
GE Cage Area	Minwax Polyurethane	Med. Aliphatic hydrocarbon solvent, mineral spirits, amorphous precipitated silica (1 gal) ³	8/31/2017	0	11.5 oz	1	UO
GE Cage Area	Raid Ant & Roach	Imiprothrine 0.1%, Cypermethrin 0.1%	8/31/2017	0	17.5 oz	1	O
GE Cage Area	Raid Wasp & Hornet	prallethrin 0.02%, Cypermethrine 0.05%	8/31/2017	0	14 oz	1	O
GE Cage Area	Rust-Oleum High Heat Ultra Finish	Acetone, Liquefied Petroleum Gas, Toluene, Xylene, Methyl ethyl ketone, Ethylbenzene , Copper chromite black, Carbon black	8/31/2017	0	4 - 12 oz; 1 - 11 oz; 1 - 15 oz	5	O
GE Cage Area	Tuff Stuff Foam Cleaner	Nonionic surfactants, 2-butoxyethanol, sodium metasilicate	8/31/2017	0	22 oz	1	O
GE Cage Area	WD40	Aliphatic hydrocarbon, Petroleum base oil, LVP aliphatic hydrocarbon, Carbon dioxide, Surfactant, Non-haz ingredients. 16 oz, 8 oz	8/31/2017	0	12 oz	2	O
Kitchen #1	Palmolive gel dishwasher detergent (75 oz)	Spring Clean Scent; opened	8/31/2017	0	75 oz	1	O
Kitchen #2	Anti-static Fluid	isopropyl alcohol (8 oz)	8/31/2017	0	4 oz	1	O
Kitchen #2	Great Value Antibacterial Hand Soap	No Information Available	8/31/2017	0	24 oz	1	O

Table A-1
Summary of Material/Product Inventory For Building 59
Indoor Air Investigation and Assessment Summary for Building 59 - Summer 2017
General Electric Company - Pittsfield, Massachusetts

Area	Identified Material/Product	Information Regarding Chemicals in Material/Product	2017 Date	2017 Background PID	Size	2017 # OF Units	Opened(O) Un-Opended (UO)
Kitchen #2	Kellco One Step N-Q	Dipropylene glycol n-butyl ether, Citric acid, Hydroxyacetic acid (32 oz) ³	8/31/2017	0	1 gallon	1	O
Kitchen #2	Lysol Foam Cleaner	Diethylene Glycol Monobutyl Ether, Isobutane (24 oz) ³	8/31/2017	0	24 oz	2	O
Kitchen #2	Spray Bottle Blue Liquid	No Information Available	8/31/2017	0	1 quart	1	O
Kitchen #2	Wild Berry Hand Soap	No Information Available	8/31/2017	0	13.5 oz	1	UO
Kitchen #2	Xerox Film Remover 43P45 (8 fl oz)	Isopropyl alcohol, opened ³	8/31/2017	0	8 oz	1	O
Kitchen #3	Bates System 3000 Anti Stat	Could not locate MSDS or ingredient list (16 oz) ⁴	8/31/2017	0	16 oz	1	O
Kitchen #3	Bissell: Fabric & Upholstery Cleaner	1-methoxy 2-propanol, Alkoxylated linear alcohol (12 oz)	8/31/2017	0	12 oz	1	O
Kitchen #3	Clorox Wipes (10.7 oz Tube)	N-alykyl (C ₁₄ 60%, C ₁₆ 30%, C ₁₂ 5%, C ₁₈ 5%) dimethyl benzyl ammonium chloride 0.145%, D-alykyl (C ₁₂ 68%, C ₁₄ 32%) dimethyl ethylbenzyl ammonium chloride 0.145%, Ethyl benzyl ammonium chloride 0.145%	8/31/2017	0	10.7 oz	1	O
Kitchen #3	Dawn: Ultra Concentrated Dish Soap	Ethanol (25 oz) ³	8/31/2017	0	25 oz	1	O
Kitchen #3	Lysol Basin Tub & Tile Cleaner	dipropylene glycol n-butyl ether, citric acid, hydroxyacetic acid (32 oz) ³ ; opened	8/31/2017	0	32 oz	1	O
Kitchen #3	Soft Scrub Cleanser	Calcium carbonate, Detergent (24 oz)	8/31/2017	0	24 oz	2	O
Kitchen #3	Soft Soap Anti-Bacterial	Triclosan, Water, Sodium C14-16, Olefin sulfonate, Lauramide DEA, Sodium chloride, Cocamidophyl betaine, fragrance, Citric acid, Dm Dm hydantion, Glycerin, Tetrasodium EDTA, Polyquaternium-7, Silk peptide, Hydrolyzed silk protein, Aloe barbadensis gel, FD&C Red No. 40, FD&C yellow No. 5, D&C red No. 33	8/31/2017	0	7.5 oz	1	O
Kitchen #3	Spic and Span Anti-Bac (22 fl. oz)	Octyl-decyl-dimethyl ammonia chloride .005%, Dioctyl-dimethyl ammonia chloride .010%, Didecyl dimethy ammonia chloride .015% alkyl (C ₁₄ .50%, C ₁₂ .40%, C ₁₈ 10%) dimethyl benzyl ammonia chloride 0.034%	8/31/2017	0	22 oz	1	O

Table A-1
Summary of Material/Product Inventory For Building 59
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General Electric Company - Pittsfield, Massachusetts

Area	Identified Material/Product	Information Regarding Chemicals in Material/Product	2017 Date	2017 Background PID	Size	2017 # OF Units	Opened(O) Un-Opended (UO)
Kitchen #3	Sunlight Dishwasher Soap	Water, anionic surfactants, urea, sodium hydroxide, citric acid, sodium chloride, fragrance, 1,2-benzisothiazolin-3-one, colors (19 oz) ³	8/31/2017	0	75 oz	1	O
Kitchen #3	Windex Multi-Surface Cleaner - Vinegar	Water, Isopropanol, Ethyleneglycol monoheylether (26 oz) ³	8/31/2017	0	26 oz	1	O
Kitchen #4	Dawn: Ultra Concentrated Dish Soap	Ethanol (25 oz) ³	8/31/2017	0	21.6 oz	1	O
Kitchen #4	Lysol Basin, Tub & Tile Cleaner	Dipropylene glycol n-butyl ether, citric acid, hydroxyacetic acid (32 oz) ³	8/31/2017	0	32 oz	1	O
Kitchen #4	Lysol Foam Cleaner (1 unit)	Ectyl decyl dimethyl ammonium chloride, dioctyl dimethyl ammonium chloride, didecyl dimethyl ammonium chloride (24 oz)	8/31/2017	0	24 oz	1	O
Kitchen #4	Spartan SD-20 All Purpose Degreaser	Diethylene glycol butyl ether, Liquefied petroleum gas, Isopropyl alcohol, Alcohol ethoxylate	8/31/2017	0	1 1b 2 oz	1	O
Kitchen #4	Lysol Tub and Tile	Ammonia	8/31/2017	0	32 oz	1	UO
Library	Lysol Disinfectant Spray	Ethanol, Petroleum gases (liquefied, sweetened), Quaternary ammonium compounds (Benzyl-C12-18-alkyldimethyl, Salts with 1,2-benzisothiazol-3(2H)-one 1, 1-dioxide (1:1))	8/31/2017	0	24 oz	1	O
Library	Pitney Bowes E-Z Seal	Non- Toxic	8/31/2017	0	16 oz	1	O
Library	Purell Hand Sanitizer	Ethyl alcohol 62%, water, glycerin, isopropyl myristate, propylene glycol, tocopheryl acetate, aminomethyl propanol, carbomer, fragrance	8/31/2017	0	1 L	4	UO
Library	Soft Scrub	Calcium carbonate, Detergent (26 oz)	8/31/2017	0	25.4 oz	1	O
Library	Xerox Anti-Static Fluid	isopropyl alcohol (8 oz)	8/31/2017	0	100 ml	1	O
Library Cubicle Area	Lysol Basin Tub & Tile Cleaner	Dipropylene glycol n-butyl ether, citric acid, hydroxyacetic acid (32 oz) ³	8/31/2017	0	32 oz	3	O

Table A-1
Summary of Material/Product Inventory For Building 59
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General Electric Company - Pittsfield, Massachusetts

Area	Identified Material/Product	Information Regarding Chemicals in Material/Product	2017 Date	2017 Background PID	Size	2017 # OF Units	Opened(O) Un-Openend (UO)
Library Cubicle Area	Fresh Products Urinal Blocks	Fragrance,Bacteria, Citric Acid, Soap, Sodium Dodecylbenzene Sulfonate, Sodium Tetraborates 5 mol, Sodium Sulfate, Propylene Glycol	8/31/2017	28 ppb	12 Individual Blocks	2	UO
Library Cubicle Area	Undetermined liguid in 3 gallon squirt container	Uknown. 1/3 full.	8/31/2017	0	3 gallon	1	O
Library Cubicle Area	Impressions Brilliant Gloss Floor Finish	Tris(2-Butoxyethyl) Phosphate, Diethylene Glycol Monoethyl Ether	8/31/2017	0	5 gallon	1	O
Library Cubicle Area	Roberts Carpet Seam Sealer	Aliphalic Petroleum Distillates, Toluene	8/31/2017	0	8 oz	1	O
Library Offices	BIC White Out	Petroleum naphtha (0.7 fl oz) ³	8/31/2017	0	20 ml	3	O
Library Offices	Elky Pro General Purpose Cleaner (1 units)	Water, Nonionic surfactant, Sodium xylene sulfonate, Tetrasodium EDTA, Sodium citrate, Isopropyl alcohol, Citrus terpenes (19 oz)	8/31/2017	0	19 oz	1	O
Library Offices	Garden Safe Insecticidal Soap (24 fl oz)	Potassium Salts of Fatty acids 1% by wt., opened	8/31/2017	0	24 oz	1	O
Library Offices	Krylon Upside Down Marking Paint (1 unit)	Soya alkyd polymer, xylene , acetone , 2 methyl propane, calcium carbonate, propane, titanium dioxide, methanol, VM&P Naptha. (18 oz.)	8/31/2017	0	24 oz	1	O
Library Offices	Oatey Plumbers Putty	Non- Hazardous	8/31/2017	0	80 oz	1	O
Library Offices	Offistamp Refill Ink	No Information Available	8/31/2017	0	10 ml	2	O
Library Offices	Quikrete Quicksetting Cement	No Information Available	8/31/2017	0	10 lbs	1	O
Library Offices	Unidentified blue liquid is spray bottle "Brigham"	No Information Available	8/31/2017	0	19 oz.	1	O
Library Offices	Lysol Foam Cleaner (1 unit)	Ectyl decyl dimethyl ammonium chloride, dioctyl dimethyl ammonium chloride, didecyl dimethyl ammonium chloride (24 oz)	8/31/2017	0	24 oz	1	O

Table A-1
Summary of Material/Product Inventory For Building 59
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General Electric Company - Pittsfield, Massachusetts

Area	Identified Material/Product	Information Regarding Chemicals in Material/Product	2017 Date	2017 Background PID	Size	2017 # OF Units	Opened(O) Un-Opended (UO)
Library Offices	Simple Green All Purpose Cleaner	Water, 2-butoxyethanol, ethoxylated alcohol mixture, tetra potassium pyrophosphate, sodium citrate, fragrance, colorant (32 oz) ³	8/31/2017	0	32 oz	1	O
Library Offices	Vision Center Lens Cleaner	No Information Available	8/31/2017	0	8 oz	1	O
Library Offices	Lysol Disinfectant Spray	Ethanol, petroleum gases (liquefied, sweetened), quaternary ammonium compounds (benzyl-C12-18-alkyldimethyl, salts with 1,2-benzisothiazol-3(2H)-one 1, 1-dioxide (1:1)) (7.5 oz) ³	8/31/2017	0	19 oz	1	O
Library supply closet	Lino-Kleener Desk & Work Station Cleaner	Ethoxylated alcohol 68439-46-3, Propylene glycol ether 5131-66-8 ^{2,3}	8/31/2017	0	1 pint	1	O
Machine Room #1	Electronic Grade CFC-113 "TF"	Trichlorotrifluoroethane CFC-113	8/31/2017	0	10 gallon	2	O
	indoor air sampling locations in March 2016.		8/31/2017				
Machine Room #1	Gas Generator Generac 5000W	Gasoline 5000W	8/31/2017	300 ppb		1	O
Machine Room #1	IDEAL-AQUA Gel Wire Pulling Lube (5) 5 gal. buckets	Oxirane, Monobutyl ether, Polyoxypropylene-polyoxyethylene	8/31/2017	0	5 gallon	4	2-UO; 3-O
Machine room #2	Red Grease	No Information Available	8/31/2017	0	1 pint	7	O
Machine room #2	Trash Pump Honda GX 160	Gasoline	8/31/2017	0	~1 gal	1	O
Machine Shop	Elky Pro General Purpose Cleaner (1 units)	Water, nonionic surfactant, sodium xylene sulfonate, tetrasodium EDTA, sodium citrate, isopropyl alcohol, citrus terpenes (19 oz)	8/31/2017	0	5 gallon	1	O
Machine Shop	Lysol Disinfectant Spray (1 unit)	Ethanol, Petroleum gases (liquefied, sweetened), Quaternary ammonium compounds (Benzyl-C12-18-alkyldimethyl, Salts with 1,2-benzisothiazol-3(2H)-one 1, 1-dioxide (1:1)) (19 oz) ³	8/31/2017	0	19 oz	1	O
Machine Shop	Yale 363A Forklift (1 unit)	Could not identify specific fluids ⁴ and propane tank	8/31/2017	0	No Available	1	O

Table A-1
Summary of Material/Product Inventory For Building 59
Indoor Air Investigation and Assessment Summary for Building 59 - Summer 2017
General Electric Company - Pittsfield, Massachusetts

Area	Identified Material/Product	Information Regarding Chemicals in Material/Product	2017 Date	2017 Background PID	Size	2017 # OF Units	Opened(O) Un-Opended (UO)
Men's Bathroom #1	Butchers Flying Colors Carpet Shampoo (1 unit)	Water, Isopropyl alcohol, Glycol, Ether solvent (32 oz)	8/31/2017	0	1 gallon	1	O
Men's Bathroom #1	Dial Antibacterial Liquid Soap (1 unit)	Ammonium lauryl sulfate, Cocamidopropyl betaine, Decyl polyglucose, Glycerin, Lauramide dea, Sodium laureth sulfate (1 gal) ³	8/31/2017	0	1 gallon	1	O
Men's Bathroom #1	Elky Pro Baseboard Cleaner (1 unit)	2-butoxyethanol, Deionized water, Tetra sodium EDTA (19 oz)	8/31/2017	0	19 Oz	1	O
Men's Bathroom #1	Glance Glass Cleaner	Sodium lauryl sulfate, ethyl alcohol	8/31/2017	0	5 gallons	1	O
Men's Bathroom #1	GoJo Natural Pumice Hand Cleaner (1 unit)	Limonene (1 gal) ³	8/31/2017	0	1 gal	1	O
Men's Bathroom #1	Johnson Diversey Carpet Shampoo (3 units)	Water, Sodium lauryl sulfate, Amine salt of modified acrylic copolymer TS (1 gal)	8/31/2017	0	1 gallon	3	O
Men's Bathroom #1	Lysol Toilet Bowl Cleaner	Methyl salicylate, ethoxylated aliphatic amines, alcohols, C12-16, ethoxylated, hydrochloric acid ³	8/31/2017	0	32 oz	1	O
Men's Bathroom #1	Pine-O-Dis Disinfectant Cleaner	N-alkyl Dimethyl Benzyl Ammonium Chloride, Didecyl dimethyl ammonium chloride, Ethyl Alcohol	8/31/2017	0	1 gallon	2	O
Men's Bathroom #1	Raid Wasp & Hornet	Prallethrin, cypermethrin (14 oz)	8/31/2017	0	14 oz	1	O
Men's Bathroom #1	Shineline Emulsifier One	Water, 2-butoxyethanol, monoethanolamine (1 gal)	8/31/2017	0	1 gallon	1	O
Men's Bathroom #1	Spartan SD-20 All Purpose Degreaser	Diethylene glycol butyl ether, Liquefied petroleum gas, Isopropyl alcohol, Alcohol ethoxylate	8/31/2017	0	1 lb 2 oz	1	O
Men's Bathroom #1	Spitfire Power Cleaner (5 gal.)	Sodium xylene sulfonate, Monoethanolamine, 2-butoxyethanol, Alkoxyated linear alcohol, Tetrasodium salt of EDTA	8/31/2017	0	5 gal	1	O
Men's Bathroom #1	Tile and Grout Cleaner	No Information Available	8/31/2017	0	32 oz	1	O

Table A-1
Summary of Material/Product Inventory For Building 59
Indoor Air Investigation and Assessment Summary for Building 59 - Summer 2017
General Electric Company - Pittsfield, Massachusetts

Area	Identified Material/Product	Information Regarding Chemicals in Material/Product	2017 Date	2017 Background PID	Size	2017 # OF Units	Opened(O) Un-Opended (UO)
Men's Bathroom #2	Lysol Toilet Bowl Cleaner	Hydrogen Chloride, Alcohols, Ethoxylated aliphatic amines ³	8/31/2017	0	32 oz	1	O
Men's Bathroom #2	Lysol Basin Tub & Tile Cleaner	dipropylene glycol n-butyl ether, citric acid, hydroxyacetic acid (32 oz) ³ ; opened	8/31/2017	0	32 oz	1	O
Men's Bathroom #2	Gojo Hand Soap	Opened and in dispenser; No hazardous ingredients, D-limonene ³	8/31/2017	0	Dispenser	1	O
Men's Bathroom #2	Glance Glass Cleaner	Sodium lauryl sulfate, ethyl alcohol	8/31/2017	0	1 gallon	1	O
Office Area	3M Desk & Office Cleaner	Isobutone, isopropyl alcohol, surfactant, sodium carbonate monohydrate, monoethanolomine (15 oz)	8/31/2017	0	15 oz	1	O
Office Area	BIC White Out	Petroleum naphtha (0.7 fl oz) ³	8/31/2017	0	20 ml	5	O
Office Area	Earwax Cleaner	No information	8/31/2017	0	15 ml	1	O
Office Area	Jergens Ultra Healing	No hazardous ingredients listed ^{2, 3}	8/31/2017	0	3 oz	1	O
Office Area	Kensington Screen Guardian	Butyl Cellusolve L.T. 2	8/31/2017	0	32 oz	1	O
Office Area	Lino-Kleener Desk & Work Station Cleaner	Ethoxylated alcohol 68439-46-3, Propylene glycol ether 5131-66-8 ^{2,3}	8/31/2017	0	1 pint	1	O
Office Area	Lysol Basin Tub & Tile Cleaner	dipropylene glycol n-butyl ether, citric acid, hydroxyacetic acid (32 oz) ³ ; opened	8/31/2017	0	32 oz	1	O
Office Area	Lysol Disinfectant Spray	Ethanol, petroleum gases (liquefied, sweetened), quaternary ammonium compounds (benzyl-C12-18-alkyldimethyl, salts with 1,2-benzisothiazol-3(2H)-one 1, 1-dioxide (1:1)) (7.5 oz) ³	8/31/2017	0	32 oz	1	O
Office Area	Spartan Terra Glaze acrylic polymer seal	water, acrylate copolymer, diethylene glycol monoethyl ether, ethylene copolymer, tributoxyethyl phosphate	8/31/2017	0	1 gallon	1	O

Table A-1
Summary of Material/Product Inventory For Building 59
Indoor Air Investigation and Assessment Summary for Building 59 - Summer 2017
General Electric Company - Pittsfield, Massachusetts

Area	Identified Material/Product	Information Regarding Chemicals in Material/Product	2017 Date	2017 Background PID	Size	2017 # OF Units	Opened(O) Un-Opended (UO)
Office Area	Safetec Hand Sanitizer	Ethyl alcohol ^{2,3}	8/31/2017	0	2 oz	1	O
Office Area	Table Paddle Cleaner Rubber Cleaner	No information	8/31/2017	0	4 oz	1	O
Office Area	X Stamper Refill Ink (5) (20 mL)	No. 22113 (Shachihata Inc.) Ethanol , Ethanol, 2-2(-butoxyethoxy) ³	8/31/2017	0	10 cc	4	O
Library Offices	WD40	Aliphatic hydrocarbon, Petroleum base oil, LVP aliphatic hydrocarbon, Carbon dioxide, Surfactant, Non-haz ingredients. 16 oz, 8 oz	8/31/2017	0	1-4 oz ; 1-12 oz	2	O
Library Offices	Expo 2 Dry Erase Markers and Cleaner	Ethanol, Resins, Water, Isopropyl alcohol, Ethylene glycol monobutyl ether	8/31/2017	0	8 oz	1	O
Willam Stanley Conference Room	Expo 2 Dry Erase Markers and Cleaner	Ethanol, Resins, Water, Isopropyl alcohol, Ethylene glycol monobutyl ether	8/31/2017	0	8 oz	1	O
Women's Bathroom #1	Dial Antibacterial Liquid Soap (1 unit)	Ammonium lauryl sulfate, Cocamidopropyl betaine, Decyl polyglucose, Glycerin, Lauramide dea, Sodium laureth sulfate (1 gal) ³	8/31/2017	0	6 oz	1	O
Women's Bathroom #1	Gojo Hand Soap	Opened and in dispenser; No hazardous ingredients, D-limonene ³	8/31/2017	0	Dispenser	1	O
Women's Bathroom #1	Green Thumb Ant Killer Trap	2-(Methylethoxy) phenyl Methylcarbamate 0.25%	8/31/2017	0	1/6 oz	2	O
Women's Bathroom #1	Kellco Stainless Steel Polish and Cleaner (15 oz)	Mineral spirits, Isoparaffinic solvent, 1-methyl-2-pyrrolidinone, Mineral oil, LPG	8/31/2017	0	15 oz	1	O
Women's Bathroom #1	Lysol Disinfectant Spray	Ethanol, petroleum gases (liquefied, sweetened), quaternary ammonium compounds (benzyl-C12-18-alkyldimethyl, salts with 1,2-benzisothiazol-3(2H)-one 1, 1-dioxide (1:1)) (7.5 oz) ³	8/31/2017	0	19 oz	1	O
Women's Bathroom #1	Lysol Foam Cleaner (1 unit)	Ectyl decyl dimethyl ammonium chloride, dioctyl dimethyl ammonium chloride, didecyl dimethyl ammonium chloride (24 oz)	8/31/2017	0	24 oz	1	O
Women's Bathroom #1	Lysol Toilet Bowl Cleaner	Methyl salicylate, ethoxylated aliphatic amines, alcohols, C12-16, ethoxylated, hydrochloric acid ³	8/31/2017	0	1 qt.	1	O

Table A-1
Summary of Material/Product Inventory For Building 59
Indoor Air Investigation and Assessment Summary for Building 59 - Summer 2017
General Electric Company - Pittsfield, Massachusetts

Area	Identified Material/Product	Information Regarding Chemicals in Material/Product	2017 Date	2017 Background PID	Size	2017 # OF Units	Opened(O) Un-Opended (UO)
Women's Bathroom #1	SC Johnson Heavy Duty Prespray	Citric Acid, Alcohol Ethoxylates, Sodium Capryl Sulfonate, Acrylic Polymers (Non-Hazardous), Tetrasodium EDTA ³	8/31/2017	0	2.5 L	1	O
Women's Bathroom #2	Cranberry Vanilla Hand Soap	No information	8/31/2017	0	13.5 oz	1	UO
Women's Bathroom #2	Dove Extra Hold Hair Spray	Dimethyl Ether, Hydrofluorocarbon 152a (Difluoroethane), SD Alcohol 40-B (Ethanol)	8/31/2017	0	2 oz	1	O
Women's Bathroom #2	Gojo Hand Soap	Opened and in dispenser; No hazardous ingredients, D-limonene ³	8/31/2017	0	Dispenser	1	O

- Notes:**
1. The material/product inventory was conducted in immediately accessible areas in and around the designated soil gas and indoor air sampling locations in August 2017.
 2. Where brands were not specified or ingredients listed on containers/items, general Safety Data Sheet(SDS) were consulted.
 3. Indicates data was obtained from an SDS.
 4. Indicates SDS could not be found for listed product.
 5. The compounds that have shown an exceedance of the applicable VISLs in the subject building (excluding the anomalous sample collected at 59-IA-3 on 10/25/12) are highlighted in bold.

ATTACHMENT B

Sample Photo Log



ATTACHMENT B Sample Location Photo Log

General Electric Company – Pittsfield, Massachusetts



Photo: #1/2
Date:
September 1, 2017
Description:
59-SS-1 and 59-IA-1

Photo: #3/4
Date:
September 1, 2017
Description:
59-SS-2 and 59-IA-2

Photo: #4/5
Date:
September 1, 2017
Description:
59-IA-3 and 59-SS-3/DUP090117

ATTACHMENT C

Sub-Slab Soil Gas & Indoor Air Sampling Logs



Indoor/Ambient Air Sample Collection Log

Sample ID: 59-IA-1

Client:	General Electric	Date/Day:	Friday, 9/1/17
Project:	Building 51 & 59 VI	Sample Intake Height:	4' ALS
Location:	Pittsfield, MA	Subcontractor:	NA
Project #:	ALL30905	Miscellaneous Equipment:	PID, PPBRAE
Samplers:	D. Zuck	Time Start:	0730
Coordinates:	(See attached Figure)	End Time:	1545
Outdoor/Indoor:	Indoors		

Instrument Readings:

Time	Canister Pressure (inches Hg)	Temperature (F)	Relative Humidity (%)	Air Speed (ft/min)	Barometric Pressure	PID (ppb)
0730	-28.0	75.5	50.3	0	30.09	0
0910	-23.0	75.3	38.5	0	30.08	0
1545	-5.25	74.3	37.7	0	30.06	0

SUMMA Canister Information

Size (circle one): 1 L **6 L**

Canister ID: 0658

Flow Controller ID: 00367

General Observations/Notes:

Photos: 123-0361
Initial Digital reading pre-sample: Lab = -29.08" Hg; -29.01" Hg on 8/31

Soil Gas Sample Collection Log

Sample ID: 59-SS-1

Client:	General Electric	Date/Day:	Friday, 9/1/17
Project:	Building 51 & 59 VI	Weather:	50% Humidity Rel., Clear and Cool
Location:	Pittsfield, MA	Temperature:	75.5° F
Project #:	ALL30905	Wind Speed/Direction:	0 (mph)
Samplers:	D. Zuck	Subcontractor:	NA
Logged By:	D. Zuck	Equipment:	PPB RAE/Helium Detector
Background PID Ambient Air Reading:	0 ppb	Moisture Content of Sampling Zone (circle one):	Dry
Sampling Depth:	See Previous Log	Approximate Volume of Sampling Train:	40 mL (4' of ¼" ID tubing)
Probe (circle one):	Permanent	Approximate Purge Volume:	120 mL = [(40) * (3 v)]
Time of Collection:	0731 - 1545		

Nearby Groundwater Monitoring Wells/Water Levels (if available):

Well ID	Depth to Groundwater (feet)
NA	NA

Size (circle one): 1 L **6 L**

Canister ID: 0732

Flow Controller ID: 00641

Tracer Gas Information (if applicable)

Tracer Gas: Helium

SUMMA Canister Information

Canister Pressure (inches Hg):		
Reported By Laboratory	Measured Prior to Sample Collection	Measured Following Sample Collection
Digital: - 29.08	Digital: - 29.01 / Analog: -27.5	Analog: -4 (-5.86 Digital)

Tracer Gas Concentration (if applicable):				
Measured from Soil Vapor Tubing		Measured in 'Concentrated' Area		
Post Purge	Post Sample	Prior to Purging	Post Purging	Post Sampling
0 ppm	0 ppm	65.5%	60.1%	21.1%

General Observations/Notes:

Photo ID: 123-0360	0 ppb reading on the PID following sample
Analog reading after 4 hrs.	Collection from soil vapor tubing.
Analog reading @ 0910 = -21.5	
Differential Pressure: 0.000	

Approximating One-Well Volume (for purging temporary points):

Each foot of ¼-inch tubing will have a volume of approximately 10 mL.

Indoor/Ambient Air Sample Collection Log

Sample ID: 59-IA-2

Client:	General Electric	Date/Day:	Friday, 9/1/17
Project:	Building 51 & 59 VI	Sample Intake Height:	4' ALS
Location:	Pittsfield, MA	Subcontractor:	NA
Project #:	ALL30905	Miscellaneous Equipment:	PID, PPBRAE
Samplers:	D. Zuck	Time Start:	0742
Coordinates:	(See attached Figure)	End Time:	1630
Outdoor/Indoor:	Indoors		

Instrument Readings:

Time	Canister Pressure (inches Hg)	Temperature (F)	Relative Humidity (%)	Air Speed (ft/min)	Barometric Pressure	PID (ppb)
0742	-30.0	75.5	44.5	0	30.08	0
0917	-24.5	76.2	39.8	0	30.08	0
1630	-5.25	76.1	38.6	0	30.06	0

SUMMA Canister Information

Size (circle one): 1 L **6 L**

Canister ID: 0484

Flow Controller ID: 40831

General Observations/Notes:

Photos: 123-0363
Initial Digital reading pre-sample: (Lab -29.08" Hg) -28.97" Hg

Soil Gas Sample Collection Log

Sample ID: 59-SS-2

Client:	General Electric	Date/Day:	Friday, 9/1/17
Project:	Building 51 & 59 VI	Weather:	Clear/Cool
Location:	Pittsfield, MA	Temperature:	75.5° F
Project #:	ALL30905	Wind Speed/Direction:	0 (mph)
Samplers:	D. Zuck	Subcontractor:	NA
Logged By:	D. Zuck	Equipment:	PPB RAE/Helium Detector
Background PID Ambient Air Reading:	0 ppb	Moisture Content of Sampling Zone (circle one):	Dry
Sampling Depth:	See Previous Log		
Probe (circle one):	Permanent	Approximate Volume of Sampling Train:	40 mL (4' of ¼" ID tubing)
Time of Collection:	0742 - 1630	Approximate Purge Volume:	120 mL = [(40) * (3 v)]

Nearby Groundwater Monitoring Wells/Water Levels (if available):

Well ID	Depth to Groundwater (feet)
NA	NA

Size (circle one): 1 L **6 L**

Canister ID: 1513

Flow Controller ID: 00409

Tracer Gas Information (if applicable)

Tracer Gas: Helium

SUMMA Canister Information

Canister Pressure (inches Hg):		
Reported By Laboratory	Measured Prior to Sample Collection	Measured Following Sample Collection
Digital: - 29.08	Digital: - 28.98 / Analog: -30	Analog: -5.5

Tracer Gas Concentration (if applicable):				
Measured from Soil Vapor Tubing		Measured in 'Concentrated' Area		
Post Purge	Post Sample	Prior to Purging	Post Purging	Post Sampling
0 ppm	ppm	67.8%	62.6%	16.2%

General Observations/Notes:

Photo ID: 123-0364	0 ppb reading on the PID following sample
Analog reading after 4 hrs.	Collection from soil vapor tubing.
Analog reading @ 0917 = -24.5	
Differential Pressure: -0.083	

Approximating One-Well Volume (for purging temporary points):

Each foot of ¼-inch tubing will have a volume of approximately 10 mL.

Indoor/Ambient Air Sample Collection Log

Sample ID: 59-IA-3 / DUP-090117

Client:	General Electric	Date/Day:	Friday, 9/1/17
Project:	Building 51 & 59 VI	Sample Intake Height:	4' ALS
Location:	Pittsfield, MA	Subcontractor:	NA
Project #:	ALL30905	Miscellaneous Equipment:	PID, PPBRAE
Samplers:	D. Zuck	Time Start:	IA 0753 / DUP 0945
Coordinates:	(See attached Figure)	End Time:	1651
Outdoor/Indoor:	Indoors		

Instrument Readings:

Time	Canister Pressure (inches Hg) Parent/DUP	Temperature (F)	Relative Humidity (%)	Air Speed (ft/min)	Barometric Pressure	PID (ppb)
0753	-28.00	77.3	45.4	0	30.07	0
0915	-24.0	75.5	40.0	0	30.08	0
0945	-22 / -30	75.0	40.0	0	30.08	0
1651	-4 / -8.75	76.2	36.4	0	30.07	0

SUMMA Canister Information

Size (circle one): 1 L **6 L**

Canister ID: IA: 1718 /
 DUP: N2816

Flow Controller ID: 00466 / 795

General Observations/Notes:

Photos: 123-0365 / 123-0373
Initial Digital reading pre-sample: (Lab: -29.08 / -29.30 inHg)
IA: -29.02 on 8/31/17 (NPS) / DUP: -29.24 9/1/17
Note: Due to regulator error, duplicate sample was initiated @ 0945.

Soil Gas Sample Collection Log

Sample ID: 59-SS-3

Client:	General Electric	Date/Day:	Friday, 9/1/17
Project:	Building 51 & 59 VI	Weather:	Clear/cool
Location:	Pittsfield, MA	Temperature:	77.3° F
Project #:	ALL30905	Wind Speed/Direction:	0 (mph)
Samplers:	D. Zuck	Subcontractor:	NA
Logged By:	D. Zuck	Equipment:	PPB RAE/Helium Detector
Background PID Ambient Air Reading:	0 ppb	Moisture Content of Sampling Zone (circle one):	Dry
Sampling Depth:	See Previous Log		
Probe (circle one):	Permanent	Approximate Volume of Sampling Train:	40 mL (4' of ¼" ID tubing)
Time of Collection:	0755 - 1651	Approximate Purge Volume:	120 mL = [(40) * (3 v)]

Nearby Groundwater Monitoring Wells/Water Levels (if available):

Well ID	Depth to Groundwater (feet)
NA	NA

Size (circle one): 1 L **6 L**

Canister ID: 0841

Flow Controller ID: 00579

Tracer Gas Information (if applicable)

Tracer Gas: Helium

SUMMA Canister Information

Canister Pressure (inches Hg):		
Reported By Laboratory	Measured Prior to Sample Collection	Measured Following Sample Collection
Digital: - 29.08	Digital: - 28.73 / Analog: - 29.5	Analog: - 5.25

Tracer Gas Concentration (if applicable):				
Measured from Soil Vapor Tubing		Measured in 'Concentrated' Area		
Post Purge	Post Sample	Prior to Purging	Post Purging	Post Sampling
0 ppm	0 ppm	75.9%	68.2%	3.0%

General Observations/Notes:

Photo ID: 123-0366	0 ppb reading on the PID following sample
Analog reading after 4 hrs.	Collection from soil vapor tubing.
Analog ready @ 0915 = -25.0	
Differential Pressure: -0.074	

Approximating One-Well Volume (for purging temporary points):

Each foot of ¼-inch tubing will have a volume of approximately 10 mL.

ATTACHMENT D

Comparison of September 2017 Indoor Air Results with Occupational Standards and Guidelines



Attachment D
Comparison of September Indoor Air Results with Occupational Standards and Guidelines
Indoor Air Investigation and Assessment Summary Report for Building 59 – Summer 2017
General Electric Company - Pittsfield, Massachusetts

Location ID: Date Collected: Sample Name:	OSHA PEL 2016	NIOSH RELs 2016	ACGIH TLV-2017	Units	Facility Area 09/01/17 59-IA-1	Library Area 09/01/17 59-IA-2	Lobby Area 09/01/17 59-IA-3
VOCs in ppm							
1,1,2,2-Tetrachloroethane	5	1	1	ppm(v)	ND(0.00017){0.000035}	ND(0.00016){0.000034}	ND(0.00016){0.000034} [ND(0.00019){0.000039}]
1,2,3-Trichloropropane	50	10	0.005	ppm(v)	ND(0.00084){0.0002}	ND(0.00082){0.0002}	ND(0.00081){0.0002} [ND(0.00094){0.00023}]
1,2,4-Trimethylbenzene ⁸	--	25	25	ppm(v)	0.000044 J	0.000066 J	0.000032 J [0.000043 J]
Acetonitrile	40	20	20	ppm(v)	ND(0.00084){0}	ND(0.00082){0}	ND(0.00081){0} [ND(0.00094){0}]
Acrolein ^{9, 11}	0.1	0.1	0.1	ppm(v)	ND(0.00084){0}	ND(0.00082){0}	ND(0.00081){0} [ND(0.00094){0}]
Benzene	1	0.1	0.5	ppm(v)	0.000062 J	0.0001 J	0.000075 J [0.000065 J]
Bromomethane ¹²	20	--	1	ppm(v)	ND(0.00084){0.00016}	ND(0.00082){0.00015}	ND(0.00081){0.00015} [ND(0.00094){0.00017}]
Carbon Disulfide	20	1	1	ppm(v)	ND(0.00084){0.000092}	ND(0.00082){0.000091}	ND(0.00081){0.00009} [ND(0.00094){0.00011}]
Chloroform ^{12, 13}	50	2	10	ppm(v)	ND(0.00017){0.000039}	ND(0.00016){0.000039}	ND(0.00016){0.000038} [ND(0.00019){0.000044}]
Ethyl acetate	400	400	400	ppm(v)	ND(0.00084){0.00028}	ND(0.00082){0.00028}	ND(0.00081){0.00027} [ND(0.00094){0.00032}]
Ethylbenzene	100	100	20	ppm(v)	ND(0.00017){0.00003}	0.00004 J	ND(0.00016){0.000029} [ND(0.00019){0.000033}]
m&p-Xylene ¹⁰	100	100	100	ppm(v)	ND(0.00017){0.000051}	0.00014 J	0.000079 J [0.00007 J]
Methyl tert-butyl ether	--	--	50	ppm(v)	ND(0.00017){0.000053}	ND(0.00016){0.000052}	ND(0.00016){0.000051} [ND(0.00019){0.000059}]
n-Hexane	500	50	50	ppm(v)	0.0003	0.0018	0.00053 [0.0006]
o-Xylene ¹⁰	100	100	100	ppm(v)	ND(0.00017){0.000044}	0.000049 J	ND(0.00016){0.000042} [ND(0.00019){0.000049}]
Tetrachloroethene	100	--	25	ppm(v)	ND(0.00017){0.000039}	ND(0.00016){0.000039}	ND(0.00016){0.000038} [ND(0.00019){0.000044}]
Toluene	200	100	20	ppm(v)	0.00046	0.0034	0.0009 [0.0011]
Trichloroethene	100	25	10	ppm(v)	0.00011 J	0.00019	0.000055 J [ND(0.00019){0.000054}]
Trichlorofluoromethane ^{9, 11}	1,000	1,000	1,000	ppm(v)	0.0025	0.0095	0.004 [0.0048]
SVOCs in ppm							
1,2,4-Trichlorobenzene ^{9, 11}	--	5	5	ppm(v)	0.0001 J	ND(0.00082){0.00004}	ND(0.00081){0.00004} [ND(0.00094){0.000046}]
1,4-Dichlorobenzene	75	--	10	ppm(v)	ND(0.00017){0.000028}	0.00019	0.00006 J [0.000069 J]
Hexachlorobutadiene	--	0.02	0.02	ppm(v)	ND(0.00084){0.00013}	ND(0.00082){0.00013}	ND(0.00081){0.00013} [ND(0.00094){0.00015}]
Naphthalene	10	10	10	ppm(v)	ND(0.00084){0.000041}	ND(0.00082){0.00004}	ND(0.00081){0.00004} [ND(0.00094){0.000046}]

Notes:

1. Samples were collected by ARCADIS and submitted for analysis of the above-listed constituents by EPA Method TO-15 to Eurofins-Air Toxic Laboratory in Folsom, California.
2. Sample results have been validated in accordance with GE's approved Field Sampling Plan/Quality Assurance Project Plan (July 2013).
3. Field duplicate sample results are presented in brackets.
4. ND - Analyte was not detected. The number in parentheses is the associated reporting limit. The number in curly brackets is the method detection limit.
5. The United States Occupational Safety and Health Administration (OSHA) permissible exposure limits (PELs) for indoor air in an occupational setting for an 8-hour workday and a 40-hour workweek are presented.
6. The National Institute for Occupational Safety and Health (NIOSH) recommended exposure levels (RELs) for up to a 10-hour time weighted averages for a 40-hour workweek are presented.
7. The American Conference of Industrial Hygienists (ACGIH) Threshold Limit Values (TLVs) for indoor air in an occupational setting for an 8-hour workday are presented.
8. The ACGIH TLV shown is value for trimethyl benzene (mixed isomers)
9. The ACGIH TLV shown is the ceiling limit.
10. The ACGIH TLV shown is value for all xylene isomers.
11. The NIOSH REL is the ceiling limit.
12. The OSHA PEL is the ceiling limit.
13. The NIOSH REL is the short term exposure limit.
14. J - Indicates that the associated numerical value is an estimated concentration.
15. -- = Occupational exposure limit not available.

ATTACHMENT E

Data Validation Report



GE Pittsfield

DATA REVIEW

INDOOR AIR INVESTIGATION AND ASSESSMENT SUMMARY REPORT FOR BUILDING 59 – SUMMER 2017

Volatile Analyses

Analyses Reported By:
Eurofins Air Toxics
Folsom, California

Report #28457R
Review Level: Tier I/II
Project: ALL30905.3001.3003B



DATA REVIEW REPORT

SUMMARY

This attachment summarizes the data validation review performed on behalf of the General Electric Company (GE) for groundwater samples collected in Fall 2017 as part of soil gas and ambient air quality investigations conducted at the Buildings 51 and 59 Site, located at the General Electric Company/Housatonic River Site in Pittsfield, Massachusetts. The review was conducted at Tier I and Tier II levels and included review of data package completeness. Only analytical data associated with constituents of concern were reviewed for this validation. Field documentation was not included in this review. Included with this assessment are the sample qualifier summary sheets, annotated sample result sheets, and chain of custody. Analyses were performed on the following samples:

SDG Number	Sample ID	Lab ID	Matrix	Sample Collection Date	Parent Sample	Analysis				
						VOC	SVOC	PCB	MET	MISC
1709036	EFFLUENT	1709036-01A	Air	9/1/2017		X				
	SDS-1	1709036-02A	Air	9/1/2017		X				
	SDS-2	1709036-03A	Air	9/1/2017		X				
1709080	59-IA-1	1709080-01A	Air	9/1/2017		X				
	59-SS-1	1709080-02A	Air	9/1/2017		X				
	59-IA-2	1709080-03A	Air	9/1/2017		X				
	59-SS-2	1709080-04A	Air	9/1/2017		X				
	59-IA-3	1709080-05A	Air	9/1/2017		X				
	59-SS-3	1709080-06A	Air	9/1/2017		X				
	DUP-090117	1709080-07A	Air	9/1/2017	59-IA-3	X				

DATA REVIEW REPORT

ANALYTICAL DATA PACKAGE DOCUMENTATION

The table below is the evaluation of the data package completeness.

Items Reviewed	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
1. Sample receipt condition		X		X	
2. Requested analyses and sample results		X		X	
3. Master tracking list		X		X	
4. Methods of analysis		X		X	
5. Reporting limits		X		X	
6. Sample collection date		X		X	
7. Laboratory sample received date		X		X	
8. Sample preservation verification (as applicable)		X		X	
9. Sample preparation/extraction/analysis dates		X		X	
10. Fully executed Chain-of-Custody (COC) form		X		X	
11. Narrative summary of QA or sample problems provided		X		X	
12. Data Package Completeness and Compliance		X		X	

Note:

QA - Quality Assurance

DATA REVIEW REPORT

ORGANIC ANALYSIS INTRODUCTION

Analyses were performed according to United States Environmental Protection Agency (USEPA) Method TO-15. Data were reviewed in accordance with Field Sampling Plan/Quality Assurance Project Plan (FSP/QAPP), General Electric Company, Pittsfield, Massachusetts, ARCADIS (Revision 5 submitted by GE on July 2, 2013 and approved by EPA on July 23, 2013).

The data review process is an evaluation of data on a technical basis rather than a determination of contract compliance. As such, the standards against which the data are being weighed may differ from those specified in the analytical method. It is assumed that the data package represents the best efforts of the laboratory and had already been subjected to adequate and sufficient quality review prior to submission.

During the review process, laboratory qualified and unqualified data are verified against the supporting documentation. Based on this evaluation, qualifier codes may be added, deleted, or modified by the data reviewer. Results are qualified with the following codes in accordance with USEPA National Functional Guidelines:

- Concentration (C) Qualifiers
 - U The compound was analyzed for but not detected. The associated value is the compound quantitation limit.
 - B The compound has been found in the sample as well as its associated blank, its presence in the sample may be suspect.
- Quantitation (Q) Qualifiers
 - E The compound was quantitated above the calibration range.
 - D Concentration is based on a diluted sample analysis.
- Validation Qualifiers
 - J The compound was positively identified; however, the associated numerical value is an estimated concentration only.
 - UJ The compound was not detected above the reported sample quantitation limit. However, the reported limit is approximate and may or may not represent the actual limit of quantitation.
 - JN The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification. The associated numerical value is an estimated concentration only.
 - U Compound considered non-detect at the listed value due to associated blank contamination.
 - N The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification.
 - R The sample results are rejected.

Two facts should be noted by all data users. First, the "R" flag means that the associated value is unusable. In other words, due to significant quality control (QC) problems, the analysis is invalid and provides no information as to whether the compound is present or not. "R" values should not appear on data tables because they cannot be relied upon, even as a last resort. The second fact to keep in mind is that no compound concentration, even if it has passed all QC tests, is guaranteed to be accurate. Strict QC serves to increase confidence in data but any value potentially contains error.

DATA REVIEW REPORT

VOLATILE ORGANIC COMPOUND (VOC) ANALYSES

1. Holding Times/Preservation

The specified holding times for the following methods are presented in the following table.

Method	Matrix	Holding Time	Preservation
USEPA TO-15	Air	30 days from collection to analysis	Ambient temperature; Return canister pressure < -1" Hg

Note:

s.u. Standard units

All samples were analyzed within the specified holding time and preservation criteria.

2. Blank Contamination

Quality assurance (QA) blanks (i.e., method and rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Rinse blanks measure contamination of samples during field operations.

A blank action level (BAL) of five times the concentration of a detected compound in an associated blank (common laboratory contaminant compounds are calculated at ten times) is calculated for QA blanks containing concentrations greater than the method detection limit (MDL). The BAL is compared to the associated sample results to determine the appropriate qualification of the sample results, if needed.

All compounds associated with the QA blanks exhibited a concentration less than the MDL, with the exception of the compounds listed in the following table. Sample results associated with QA blank contamination that were greater than the BAL resulted in the removal of the laboratory qualifier (B) of data. Sample results less than the BAL associated with the following sample locations were qualified as listed in the following table.

Sample Location s	Analytes	Sample Result	Qualification
<u>SDG 1709080</u> 59-IA-1 59-IA-2 59-SS-2 59-IA-3 59-SS-3 DUP-090117	Naphthalene (MB)	Detected sample results <RL and <BAL	"U" at the RL

Note:

RL Reporting limit

3. Mass Spectrometer Tuning

Mass spectrometer performance was acceptable and all analyses were performed within a 12-hour tune clock.

DATA REVIEW REPORT

System performance and column resolution were acceptable.

4. Calibration

Satisfactory instrument calibration is established to ensure that the instrument is capable of producing acceptable quantitative data. An initial calibration demonstrates that the instrument is capable of acceptable performance at the beginning of an experimental sequence. The continuing calibration verifies that the instrument daily performance is satisfactory.

4.1 Initial Calibration

The method specifies percent relative standard deviation (%RSD) and relative response factor (RRF) limits for select compounds only. A technical review of the data applies limits to all compounds with no exceptions.

All target compounds associated with the initial calibration standards must exhibit a %RSD less than the control limit (15%) or a correlation coefficient greater than 0.99 and an RRF value greater than control limit (0.05).

4.2 Continuing Calibration

All target compounds associated with the continuing calibration standard must exhibit a percent difference (%D) less than the control limit (25%) and RRF value greater than control limit (0.05).

All compounds associated with the calibrations were within the specified control limits.

5. Surrogates/System Monitoring Compounds

All samples to be analyzed for organic compounds are spiked with surrogate compounds prior to sample preparation to evaluate overall laboratory performance and efficiency of the analytical technique. VOC analysis requires that all surrogates associated with the analysis exhibit recoveries within the laboratory-established acceptance limits.

All surrogate recoveries were within control limits.

6. Internal Standard Performance

Internal standard performance criteria insure that the GC/MS sensitivity and response are stable during every sample analysis. The criteria require the internal standard compounds associated with the VOC exhibit area counts that are not greater than two times (+100%) or less than one-half (-50%) of the area counts of the associated continuing calibration standard.

All internal standard responses were within control limits.

7. Matrix Spike/Matrix Spike Duplicate (MS/MSD) Analysis

MS/MSD data are used to assess the precision and accuracy of the analytical method. The compounds used to perform the MS/MSD analysis must exhibit a percent recovery within the laboratory-established acceptance limits. The relative percent difference (RPD) between the MS/MSD recoveries must exhibit an RPD within 20%.

Note: The MS/MSD recovery control limits do not apply for MS/MSD performed on sample locations where the compound concentration detected in the parent sample exceeds the MS/MSD concentration by a factor of four or greater.

An MS/MSD was not performed on a sample within this SDG.

DATA REVIEW REPORT

8. Laboratory Control Sample/Laboratory Control Sample Duplicate (LCS/LCSD) Analysis

The LCS/LCSD analysis is used to assess the precision and accuracy of the analytical method independent of matrix interferences. The compounds associated with the LCS/LCSD analysis must exhibit a percent recovery within the laboratory-established acceptance limits.

All compounds associated with the LCS/LCSD analysis exhibited recoveries within the control limits.

9. Field Duplicate Analysis

Field duplicate analysis is used to assess the overall precision of the field sampling procedures and analytical method. A control limit of 50% for air matrices is applied to the RPD between the parent sample and the field duplicate. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the RL, a control limit of two times the RL is applied for water matrices.

Results for duplicate samples are summarized in the following table.

Sample ID/Duplicate ID	Compound	Sample Result	Duplicate Result	RPD
59-IA-3/DUP-090117	1,2,4-Trimethylbenzene	0.16 J	0.21 J	AC
	Benzene	0.24 J	0.21 J	AC
	Freon 11	22	27	20.4%
	Hexane	1.9	2.1	AC
	m,p-Xylene	0.34 J	0.31 J	AC
	Toluene	3.4	4.2	AC
	Trichloroethene	0.3 J	1.0 U	AC
	1,4-Dichlorobenzene	0.36 J	0.42 J	AC
	Naphthalene	0.29 J	0.25 J	AC

Notes:

AC Acceptable

The calculated RPDs between the parent sample and field duplicate were acceptable.

10. Compound Identification

Compounds are identified on the GC/MS by using the analytes relative retention time and ion spectra.

All identified compounds met the specified criteria.

11. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

DATA REVIEW REPORT

DATA VALIDATION CHECKLIST FOR VOCs

VOCs: USEPA TO-15	Reported		Performance Acceptable		Not Required	
	No	Yes	No	Yes		
GAS CHROMATOGRAPHY/MASS SPECTROMETRY (GC/MS)						
Tier I Validation						
Holding times/Preservation		X		X		
Reporting limits (units)		X		X		
Blanks						
A. Method blanks		X	X			
B. Equipment blanks	X				X	
C. Trip blanks	X				X	
Laboratory Control Sample (LCS)		X		X		
Laboratory Control Sample Duplicate(LCSD)		X		X		
LCS/LCSD Precision (RPD)		X		X		
Matrix Spike (MS)	X				X	
Matrix Spike Duplicate(MSD)	X				X	
MS/MSD Precision (RPD)	X				X	
Field/Lab Duplicate (RPD)		X		X		
Surrogate Spike Recoveries		X		X		
Dilution Factor		X		X		
Moisture Content	X				X	
Tier II Validation						
System performance and column resolution		X		X		
Initial calibration %RSDs		X		X		
Continuing calibration RRFs		X		X		
Continuing calibration %Ds		X		X		
Instrument tune and performance check		X		X		
Ion abundance criteria for each instrument used		X		X		
Internal standard		X		X		
Compound identification and quantitation						
A. Reconstructed ion chromatograms		X		X		
B. Quantitation Reports		X		X		

DATA REVIEW REPORT

VOCs: USEPA TO-15	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
GAS CHROMATOGRAPHY/MASS SPECTROMETRY (GC/MS)					
C. RT of sample compounds within the established RT windows		X		X	
D. Transcription/calculation errors present		X		X	
E. Reporting limits adjusted to reflect sample dilutions		X		X	

Notes:

%RSD Relative standard deviation

%R Percent recovery

RPD Relative percent difference

%D Percent difference

DATA REVIEW REPORT

VALIDATION PERFORMED BY: Andrew Korycinski

SIGNATURE:



DATE: October 5, 2017

PEER REVIEW: Dennis Capria

DATE: October 11, 2017

CHAIN OF CUSTODY SAMPLE ANALYSIS DATA SHEETS





Relinquishing signature on this document indicates that sample is being shipped in compliance with all applicable local, State, Federal, national, and international laws, regulations and ordinances of any kind. Air Toxics Limited assumes no liability with respect to the collection, handling or shipping of these samples. Relinquishing signature also indicates agreement to hold harmless, defend, and indemnify Air Toxics Limited against any claim, demand, or action, of any kind, related to the collection, handling, or shipping of samples. D.O.T. Hotline (800) 467-4922

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(916) 985-1000 FAX (916) 985-1020**

Page 1 of 1

Phone 516-369-2741 Fax _____

Project Name GE PITTSFIELD, MA

specify

N He

Lab Use Only	Shipper Name	Air Bill #	Temp (°C)	Condition	Custody Seals Intact?			Work Order #
					Yes	No	None	
	Fidelix		24	Good			☒	1709036



Air Toxics

Client Sample ID: EFFLUENT

Lab ID#: 1709036-01A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	v090615	Date of Collection:	9/1/17 10:45:00 AM
Dil. Factor:	16.2	Date of Analysis:	9/6/17 05:26 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Bromomethane	8.1	Not Detected	31	Not Detected
Freon 11	1.6	11	9.1	62
Carbon Disulfide	8.1	Not Detected	25	Not Detected
Methyl tert-butyl ether	1.6	Not Detected	5.8	Not Detected
Hexane	1.6	3.4	5.7	12
Chloroform	1.6	0.91 J	7.9	4.4 J
Benzene	1.6	Not Detected	5.2	Not Detected
Trichloroethene	1.6	390	8.7	2100
Toluene	1.6	4.6	6.1	17
Tetrachloroethene	1.6	1.5 J	11	10 J
Ethyl Benzene	1.6	Not Detected	7.0	Not Detected
m,p-Xylene	1.6	Not Detected	7.0	Not Detected
o-Xylene	1.6	Not Detected	7.0	Not Detected
1,1,2,2-Tetrachloroethane	1.6	Not Detected	11	Not Detected
1,2,4-Trimethylbenzene	1.6	Not Detected	8.0	Not Detected
1,4-Dichlorobenzene	1.6	Not Detected	9.7	Not Detected
1,2,4-Trichlorobenzene	8.1	Not Detected	60	Not Detected
Hexachlorobutadiene	8.1	Not Detected	86	Not Detected
Acrolein	8.1	Not Detected	18	Not Detected
Acetonitrile	8.1	Not Detected	14	Not Detected
Ethyl Acetate	8.1	Not Detected	29	Not Detected
Naphthalene	8.1	Not Detected	42	Not Detected
1,2,3-Trichloropropane	8.1	Not Detected	49	Not Detected

J = Estimated value.

Container Type: 6 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	102	70-130
Toluene-d8	97	70-130
4-Bromofluorobenzene	107	70-130



Air Toxics

Client Sample ID: SDS-1

Lab ID#: 1709036-02A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	17091809	Date of Collection:	9/1/17 10:30:00 AM
Dil. Factor:	10.8	Date of Analysis:	9/18/17 06:17 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Bromomethane	54	Not Detected	210	Not Detected
Freon 11	5.4	8.6	30	48
Carbon Disulfide	22	2.0 J	67	6.3 J
Methyl tert-butyl ether	22	Not Detected	78	Not Detected
Hexane	5.4	Not Detected	19	Not Detected
Chloroform	5.4	2.4 J	26	12 J
Benzene	5.4	Not Detected	17	Not Detected
Trichloroethene	5.4	1500	29	8100
Toluene	5.4	1.3 J	20	5.0 J
Tetrachloroethene	5.4	4.8 J	37	32 J
Ethyl Benzene	5.4	Not Detected	23	Not Detected
m,p-Xylene	5.4	Not Detected	23	Not Detected
o-Xylene	5.4	Not Detected	23	Not Detected
1,1,2,2-Tetrachloroethane	5.4	Not Detected	37	Not Detected
1,2,4-Trimethylbenzene	5.4	Not Detected	26	Not Detected
1,4-Dichlorobenzene	5.4	Not Detected	32	Not Detected
1,2,4-Trichlorobenzene	22	Not Detected	160	Not Detected
Hexachlorobutadiene	22	Not Detected	230	Not Detected
Naphthalene	11	Not Detected	57	Not Detected
1,2,3-Trichloropropane	22	Not Detected	130	Not Detected
Acetonitrile	54	Not Detected	91	Not Detected
Ethyl Acetate	22	Not Detected	78	Not Detected

TENTATIVELY IDENTIFIED COMPOUNDS

Compound	CAS Number	Match Quality	Amount (ppbv)
Acrolein	107-02-8	NA	Not Detected

J = Estimated value.

Container Type: 6 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
Toluene-d8	103	70-130
1,2-Dichloroethane-d4	108	70-130
4-Bromofluorobenzene	89	70-130



Air Toxics

Client Sample ID: SDS-2

Lab ID#: 1709036-03A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	17091810	Date of Collection:	9/1/17 11:11:00 AM
Dil. Factor:	4.46	Date of Analysis:	9/18/17 06:43 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Bromomethane	22	Not Detected	87	Not Detected
Freon 11	2.2	4.8	12	27
Carbon Disulfide	8.9	1.5 J	28	4.6 J
Methyl tert-butyl ether	8.9	Not Detected	32	Not Detected
Hexane	2.2	Not Detected	7.8	Not Detected
Chloroform	2.2	10	11	51
Benzene	2.2	0.49 J	7.1	1.6 J
Trichloroethene	2.2	720	12	3900
Toluene	2.2	0.50 J	8.4	1.9 J
Tetrachloroethene	2.2	1.0 J	15	7.0 J
Ethyl Benzene	2.2	Not Detected	9.7	Not Detected
m,p-Xylene	2.2	Not Detected	9.7	Not Detected
o-Xylene	2.2	Not Detected	9.7	Not Detected
1,1,2,2-Tetrachloroethane	2.2	Not Detected	15	Not Detected
1,2,4-Trimethylbenzene	2.2	Not Detected	11	Not Detected
1,4-Dichlorobenzene	2.2	Not Detected	13	Not Detected
1,2,4-Trichlorobenzene	8.9	Not Detected	66	Not Detected
Hexachlorobutadiene	8.9	Not Detected	95	Not Detected
Naphthalene	4.5	Not Detected	23	Not Detected
1,2,3-Trichloropropane	8.9	Not Detected	54	Not Detected
Acetonitrile	22	Not Detected	37	Not Detected
Ethyl Acetate	8.9	Not Detected	32	Not Detected

TENTATIVELY IDENTIFIED COMPOUNDS

Compound	CAS Number	Match Quality	Amount (ppbv)
Acrolein	107-02-8	NA	Not Detected

J = Estimated value.

Container Type: 6 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
Toluene-d8	103	70-130
1,2-Dichloroethane-d4	109	70-130
4-Bromofluorobenzene	89	70-130



Air Toxics

Client Sample ID: 59-IA-1

Lab ID#: 1709080-01A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	v091810	Date of Collection:	9/1/17 3:45:00 PM
Dil. Factor:	1.67	Date of Analysis:	9/18/17 03:37 PM

Compound	Rpt. Limit (ppmv)	Amount (ppmv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Bromomethane	0.00084	Not Detected	3.2	Not Detected
Freon 11	0.00017	0.0025	0.94	14
Carbon Disulfide	0.00084	Not Detected	2.6	Not Detected
Methyl tert-butyl ether	0.00017	Not Detected	0.60	Not Detected
Hexane	0.00017	0.00030	0.59	1.0
Chloroform	0.00017	Not Detected	0.82	Not Detected
Benzene	0.00017	0.000062 J	0.53	0.20 J
Trichloroethene	0.00017	0.00011 J	0.90	0.57 J
Toluene	0.00017	0.00046	0.63	1.7
Tetrachloroethene	0.00017	Not Detected	1.1	Not Detected
Ethyl Benzene	0.00017	Not Detected	0.72	Not Detected
m,p-Xylene	0.00017	Not Detected	0.72	Not Detected
o-Xylene	0.00017	Not Detected	0.72	Not Detected
1,1,2,2-Tetrachloroethane	0.00017	Not Detected	1.1	Not Detected
1,2,4-Trimethylbenzene	0.00017	0.000044 J	0.82	0.22 J
1,4-Dichlorobenzene	0.00017	Not Detected	1.0	Not Detected
1,2,4-Trichlorobenzene	0.00084	0.00010 J	6.2	0.76 J
Hexachlorobutadiene	0.00084	Not Detected	8.9	Not Detected
Acrolein	0.00084	Not Detected	1.9	Not Detected
Acetonitrile	0.00084	Not Detected	1.4	Not Detected
Ethyl Acetate	0.00084	Not Detected	3.0	Not Detected
Naphthalene	0.00084 U	~~0.000051 J~~	4.4 U	~~0.27 J~~
1,2,3-Trichloropropane	0.00084	Not Detected	5.0	Not Detected

J = Estimated value.

Container Type: 6 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	102	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	100	70-130



Air Toxics

Client Sample ID: 59-SS-1

Lab ID#: 1709080-02A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	v091811	Date of Collection:	9/1/17 3:45:00 PM
Dil. Factor:	8.55	Date of Analysis:	9/18/17 04:27 PM

Compound	Rpt. Limit (ppmv)	Amount (ppmv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Bromomethane	0.0043	Not Detected	17	Not Detected
Freon 11	0.00086	0.00069 J	4.8	3.8 J
Carbon Disulfide	0.0043	Not Detected	13	Not Detected
Methyl tert-butyl ether	0.00086	Not Detected	3.1	Not Detected
Hexane	0.00086	Not Detected	3.0	Not Detected
Chloroform	0.00086	0.018	4.2	87
Benzene	0.00086	0.00017 J	2.7	0.55 J
Trichloroethene	0.00086	0.25	4.6	1300
Toluene	0.00086	0.00045 J	3.2	1.7 J
Tetrachloroethene	0.00086	0.0022	5.8	15
Ethyl Benzene	0.00086	0.00015 J	3.7	0.67 J
m,p-Xylene	0.00086	0.00047 J	3.7	2.0 J
o-Xylene	0.00086	Not Detected	3.7	Not Detected
1,1,2,2-Tetrachloroethane	0.00086	Not Detected	5.9	Not Detected
1,2,4-Trimethylbenzene	0.00086	0.00030 J	4.2	1.5 J
1,4-Dichlorobenzene	0.00086	Not Detected	5.1	Not Detected
1,2,4-Trichlorobenzene	0.0043	Not Detected	32	Not Detected
Hexachlorobutadiene	0.0043	Not Detected	46	Not Detected
Acrolein	0.0043	Not Detected	9.8	Not Detected
Acetonitrile	0.0043	Not Detected	7.2	Not Detected
Ethyl Acetate	0.0043	Not Detected	15	Not Detected
Naphthalene	0.0043	Not Detected	22	Not Detected
1,2,3-Trichloropropane	0.0043	Not Detected	26	Not Detected

J = Estimated value.

Container Type: 6 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	98	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	109	70-130

Client Sample ID: 59-IA-2

Lab ID#: 1709080-03A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	v091818	Date of Collection:	9/1/17 4:30:00 PM
Dil. Factor:	1.65	Date of Analysis:	9/18/17 09:17 PM

Compound	Rpt. Limit (ppmv)	Amount (ppmv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Bromomethane	0.00082	Not Detected	3.2	Not Detected
Freon 11	0.00016	0.0095	0.93	54
Carbon Disulfide	0.00082	Not Detected	2.6	Not Detected
Methyl tert-butyl ether	0.00016	Not Detected	0.59	Not Detected
Hexane	0.00016	0.0018	0.58	6.5
Chloroform	0.00016	Not Detected	0.80	Not Detected
Benzene	0.00016	0.00010 J	0.53	0.33 J
Trichloroethene	0.00016	0.00019	0.89	1.0
Toluene	0.00016	0.0034	0.62	13
Tetrachloroethene	0.00016	Not Detected	1.1	Not Detected
Ethyl Benzene	0.00016	0.000040 J	0.72	0.17 J
m,p-Xylene	0.00016	0.00014 J	0.72	0.62 J
o-Xylene	0.00016	0.000049 J	0.72	0.21 J
1,1,2,2-Tetrachloroethane	0.00016	Not Detected	1.1	Not Detected
1,2,4-Trimethylbenzene	0.00016	0.000066 J	0.81	0.32 J
1,4-Dichlorobenzene	0.00016	0.00019	0.99	1.1
1,2,4-Trichlorobenzene	0.00082	Not Detected	6.1	Not Detected
Hexachlorobutadiene	0.00082	Not Detected	8.8	Not Detected
Acrolein	0.00082	Not Detected	1.9	Not Detected
Acetonitrile	0.00082	Not Detected	1.4	Not Detected
Ethyl Acetate	0.00082	Not Detected	3.0	Not Detected
Naphthalene	0.00082 U	~~0.000052 J~~	4.3 U	~~0.27 J~~
1,2,3-Trichloropropane	0.00082	Not Detected	5.0	Not Detected

J = Estimated value.

Container Type: 6 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	102	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	99	70-130



Air Toxics

Client Sample ID: 59-SS-2

Lab ID#: 1709080-04A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	v091813	Date of Collection:	9/1/17 4:30:00 PM
Dil. Factor:	1.64	Date of Analysis:	9/18/17 06:09 PM

Compound	Rpt. Limit (ppmv)	Amount (ppmv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Bromomethane	0.00082	Not Detected	3.2	Not Detected
Freon 11	0.00016	0.0087	0.92	49
Carbon Disulfide	0.00082	Not Detected	2.6	Not Detected
Methyl tert-butyl ether	0.00016	Not Detected	0.59	Not Detected
Hexane	0.00016	0.00011 J	0.58	0.40 J
Chloroform	0.00016	0.000084 J	0.80	0.41 J
Benzene	0.00016	0.000083 J	0.52	0.26 J
Trichloroethene	0.00016	0.0094	0.88	51
Toluene	0.00016	0.00042	0.62	1.6
Tetrachloroethene	0.00016	0.00012 J	1.1	0.83 J
Ethyl Benzene	0.00016	0.000062 J	0.71	0.27 J
m,p-Xylene	0.00016	0.00028	0.71	1.2
o-Xylene	0.00016	0.00011 J	0.71	0.49 J
1,1,2,2-Tetrachloroethane	0.00016	Not Detected	1.1	Not Detected
1,2,4-Trimethylbenzene	0.00016	0.00018	0.81	0.87
1,4-Dichlorobenzene	0.00016	Not Detected	0.99	Not Detected
1,2,4-Trichlorobenzene	0.00082	0.000050 J	6.1	0.37 J
Hexachlorobutadiene	0.00082	Not Detected	8.7	Not Detected
Acrolein	0.00082	Not Detected	1.9	Not Detected
Acetonitrile	0.00082	Not Detected	1.4	Not Detected
Ethyl Acetate	0.00082	Not Detected	3.0	Not Detected
Naphthalene	0.00082 U	~~0.00023 J~~	4.3 U	~~1.2 J~~
1,2,3-Trichloropropane	0.00082	Not Detected	4.9	Not Detected

J = Estimated value.

Container Type: 6 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	105	70-130
Toluene-d8	96	70-130
4-Bromofluorobenzene	106	70-130



Air Toxics

Client Sample ID: 59-IA-3

Lab ID#: 1709080-05A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	v091819	Date of Collection:	9/1/17 4:51:00 PM
Dil. Factor:	1.62	Date of Analysis:	9/18/17 09:53 PM

Compound	Rpt. Limit (ppmv)	Amount (ppmv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Bromomethane	0.00081	Not Detected	3.1	Not Detected
Freon 11	0.00016	0.0040	0.91	22
Carbon Disulfide	0.00081	Not Detected	2.5	Not Detected
Methyl tert-butyl ether	0.00016	Not Detected	0.58	Not Detected
Hexane	0.00016	0.00053	0.57	1.9
Chloroform	0.00016	Not Detected	0.79	Not Detected
Benzene	0.00016	0.000075 J	0.52	0.24 J
Trichloroethene	0.00016	0.000055 J	0.87	0.30 J
Toluene	0.00016	0.00090	0.61	3.4
Tetrachloroethene	0.00016	Not Detected	1.1	Not Detected
Ethyl Benzene	0.00016	Not Detected	0.70	Not Detected
m,p-Xylene	0.00016	0.000079 J	0.70	0.34 J
o-Xylene	0.00016	Not Detected	0.70	Not Detected
1,1,2,2-Tetrachloroethane	0.00016	Not Detected	1.1	Not Detected
1,2,4-Trimethylbenzene	0.00016	0.000032 J	0.80	0.16 J
1,4-Dichlorobenzene	0.00016	0.000060 J	0.97	0.36 J
1,2,4-Trichlorobenzene	0.00081	Not Detected	6.0	Not Detected
Hexachlorobutadiene	0.00081	Not Detected	8.6	Not Detected
Acrolein	0.00081	Not Detected	1.8	Not Detected
Acetonitrile	0.00081	Not Detected	1.4	Not Detected
Ethyl Acetate	0.00081	Not Detected	2.9	Not Detected
Naphthalene	0.00081 U	~~0.000056 J~~	4.2 U	~~0.29 J~~
1,2,3-Trichloropropane	0.00081	Not Detected	4.9	Not Detected

J = Estimated value.

Container Type: 6 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	99	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	101	70-130

Client Sample ID: 59-SS-3

Lab ID#: 1709080-06A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	v091814	Date of Collection:	9/1/17 4:51:00 PM
Dil. Factor:	1.60	Date of Analysis:	9/18/17 06:45 PM

Compound	Rpt. Limit (ppmv)	Amount (ppmv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Bromomethane	0.00080	Not Detected	3.1	Not Detected
Freon 11	0.00016	0.0064	0.90	36
Carbon Disulfide	0.00080	Not Detected	2.5	Not Detected
Methyl tert-butyl ether	0.00016	Not Detected	0.58	Not Detected
Hexane	0.00016	Not Detected	0.56	Not Detected
Chloroform	0.00016	0.00024	0.78	1.2
Benzene	0.00016	0.00014 J	0.51	0.44 J
Trichloroethene	0.00016	0.012	0.86	66
Toluene	0.00016	0.00035	0.60	1.3
Tetrachloroethene	0.00016	0.00033	1.1	2.2
Ethyl Benzene	0.00016	0.000057 J	0.69	0.25 J
m,p-Xylene	0.00016	0.00036	0.69	1.5
o-Xylene	0.00016	0.00012 J	0.69	0.50 J
1,1,2,2-Tetrachloroethane	0.00016	Not Detected	1.1	Not Detected
1,2,4-Trimethylbenzene	0.00016	0.00021	0.79	1.0
1,4-Dichlorobenzene	0.00016	Not Detected	0.96	Not Detected
1,2,4-Trichlorobenzene	0.00080	Not Detected	5.9	Not Detected
Hexachlorobutadiene	0.00080	Not Detected	8.5	Not Detected
Acrolein	0.00080	Not Detected	1.8	Not Detected
Acetonitrile	0.00080	Not Detected	1.3	Not Detected
Ethyl Acetate	0.00080	Not Detected	2.9	Not Detected
Naphthalene	0.00080 U	~~0.00019 J~~	4.2 U	~~1.0 J~~
1,2,3-Trichloropropane	0.00080	Not Detected	4.8	Not Detected

J = Estimated value.

Container Type: 6 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	109	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	104	70-130



Air Toxics

Client Sample ID: DUP-090117

Lab ID#: 1709080-07A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	v091815	Date of Collection:	9/1/17
Dil. Factor:	1.87	Date of Analysis:	9/18/17 07:24 PM

Compound	Rpt. Limit (ppmv)	Amount (ppmv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Bromomethane	0.00094	Not Detected	3.6	Not Detected
Freon 11	0.00019	0.0048	1.0	27
Carbon Disulfide	0.00094	Not Detected	2.9	Not Detected
Methyl tert-butyl ether	0.00019	Not Detected	0.67	Not Detected
Hexane	0.00019	0.00060	0.66	2.1
Chloroform	0.00019	Not Detected	0.91	Not Detected
Benzene	0.00019	0.000065 J	0.60	0.21 J
Trichloroethene	0.00019	Not Detected	1.0	Not Detected
Toluene	0.00019	0.0011	0.70	4.2
Tetrachloroethene	0.00019	Not Detected	1.3	Not Detected
Ethyl Benzene	0.00019	Not Detected	0.81	Not Detected
m,p-Xylene	0.00019	0.000070 J	0.81	0.31 J
o-Xylene	0.00019	Not Detected	0.81	Not Detected
1,1,2,2-Tetrachloroethane	0.00019	Not Detected	1.3	Not Detected
1,2,4-Trimethylbenzene	0.00019	0.000043 J	0.92	0.21 J
1,4-Dichlorobenzene	0.00019	0.000069 J	1.1	0.42 J
1,2,4-Trichlorobenzene	0.00094	Not Detected	6.9	Not Detected
Hexachlorobutadiene	0.00094	Not Detected	10	Not Detected
Acrolein	0.00094	Not Detected	2.1	Not Detected
Acetonitrile	0.00094	Not Detected	1.6	Not Detected
Ethyl Acetate	0.00094	Not Detected	3.4	Not Detected
Naphthalene	0.00094 U	~~0.000048 J~~	4.9 U	~~0.25 J~~
1,2,3-Trichloropropane	0.00094	Not Detected	5.6	Not Detected

J = Estimated value.

Container Type: 6 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	103	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	101	70-130

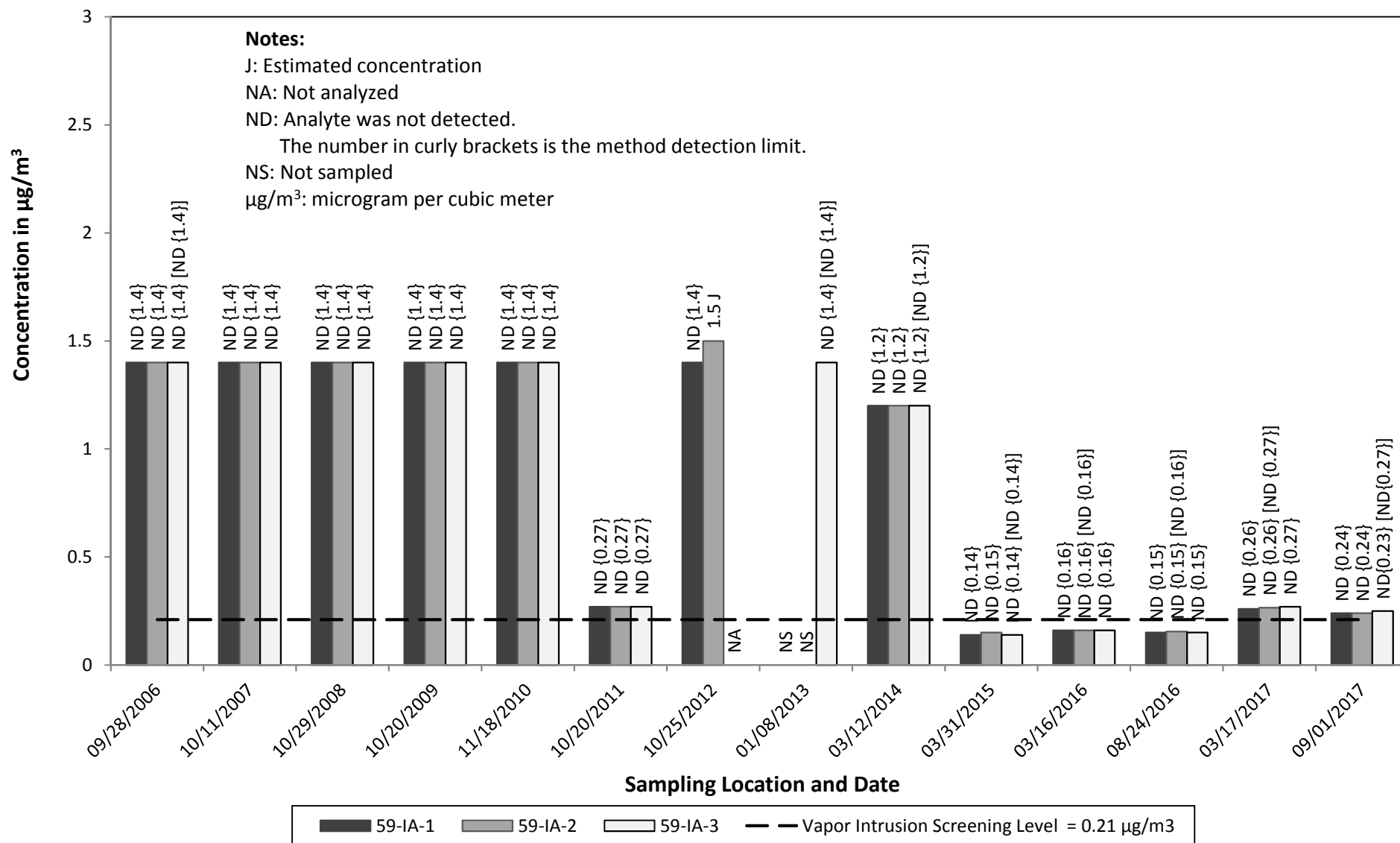
ATTACHMENT F

Bar Charts for Constituents Detected in Indoor Air in Building 59 at Concentrations Greater Than 50% of VISLs



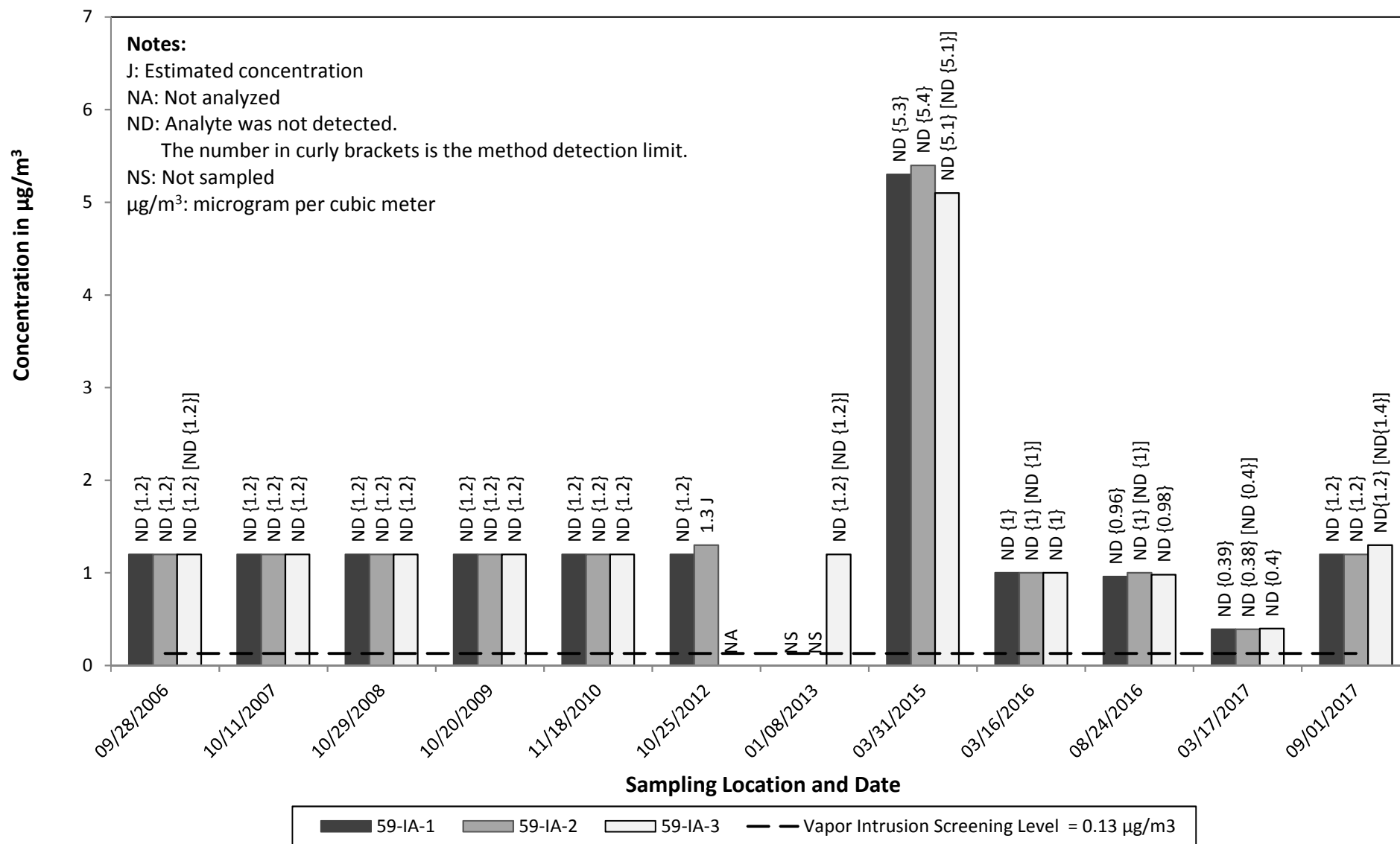
**Attachment F - Building 59 Indoor Air Data for
1,1,2,2-Tetrachloroethane**

**Sub-Slab Soil Gas and Indoor Air Investigation Summary
Report for Building 59 – Summer 2017
General Electric Company - Pittsfield, Massachusetts**



**Attachment F - Building 59 Indoor Air Data for
1,2,3-Trichloropropane**

**Sub-Slab Soil Gas and Indoor Air Investigation Summary
Report for Building 59 – Summer 2017
General Electric Company - Pittsfield, Massachusetts**

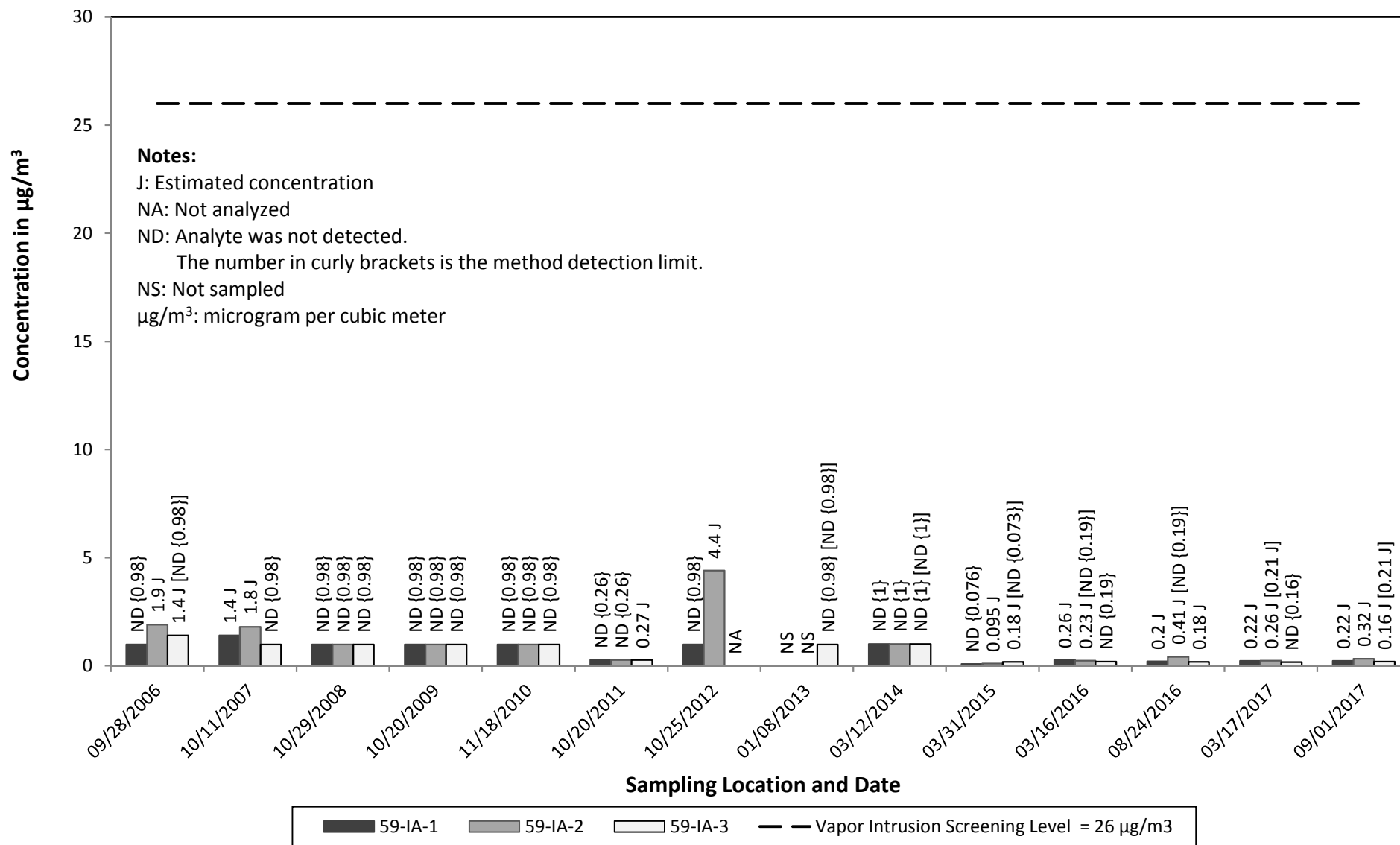


**Attachment F - Building 59 Indoor Air Data for
1,2,4-Trimethylbenzene**

Sub-Slab Soil Gas and Indoor Air Investigation Summary

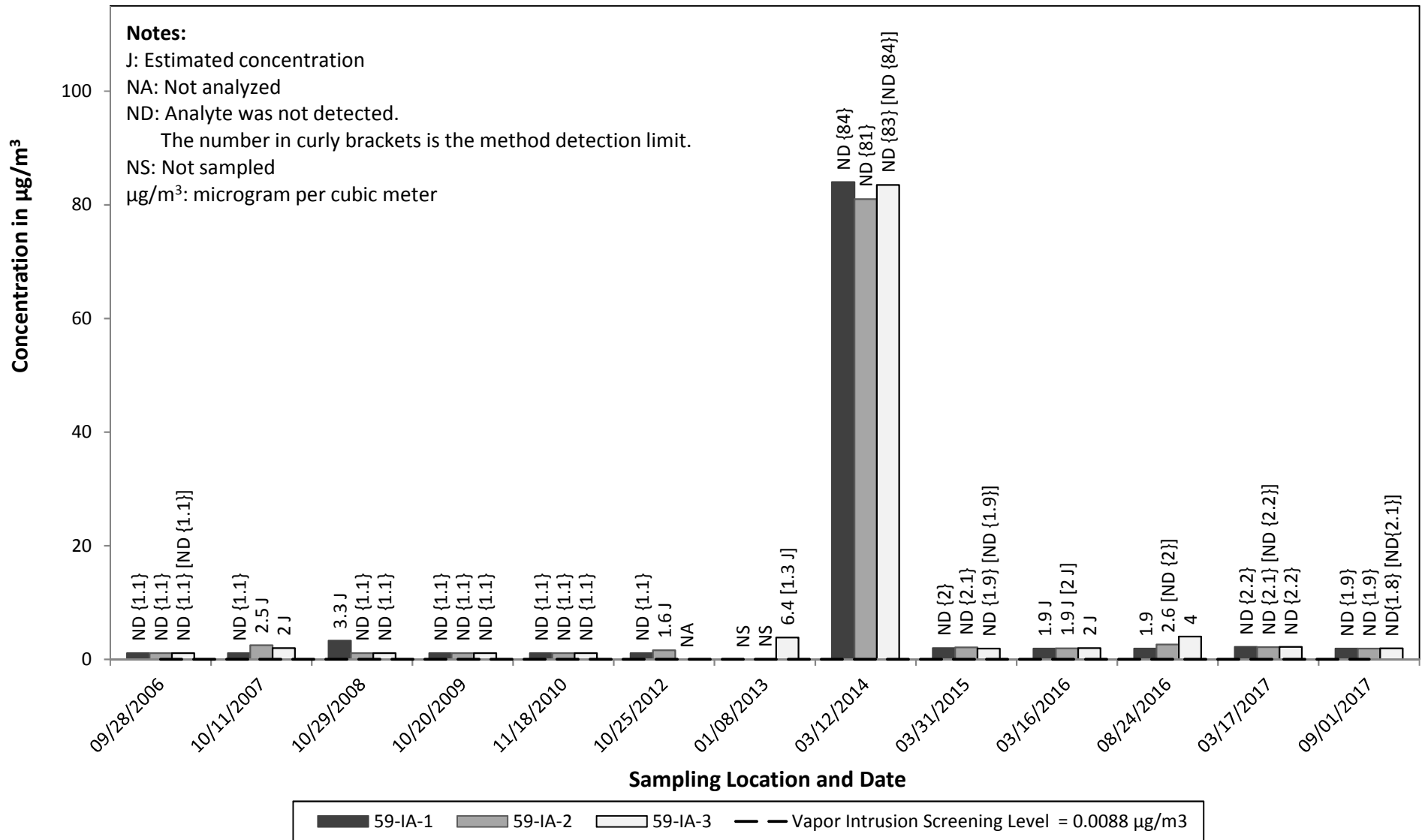
Report for Building 59 – Summer 2017

General Electric Company - Pittsfield, Massachusetts



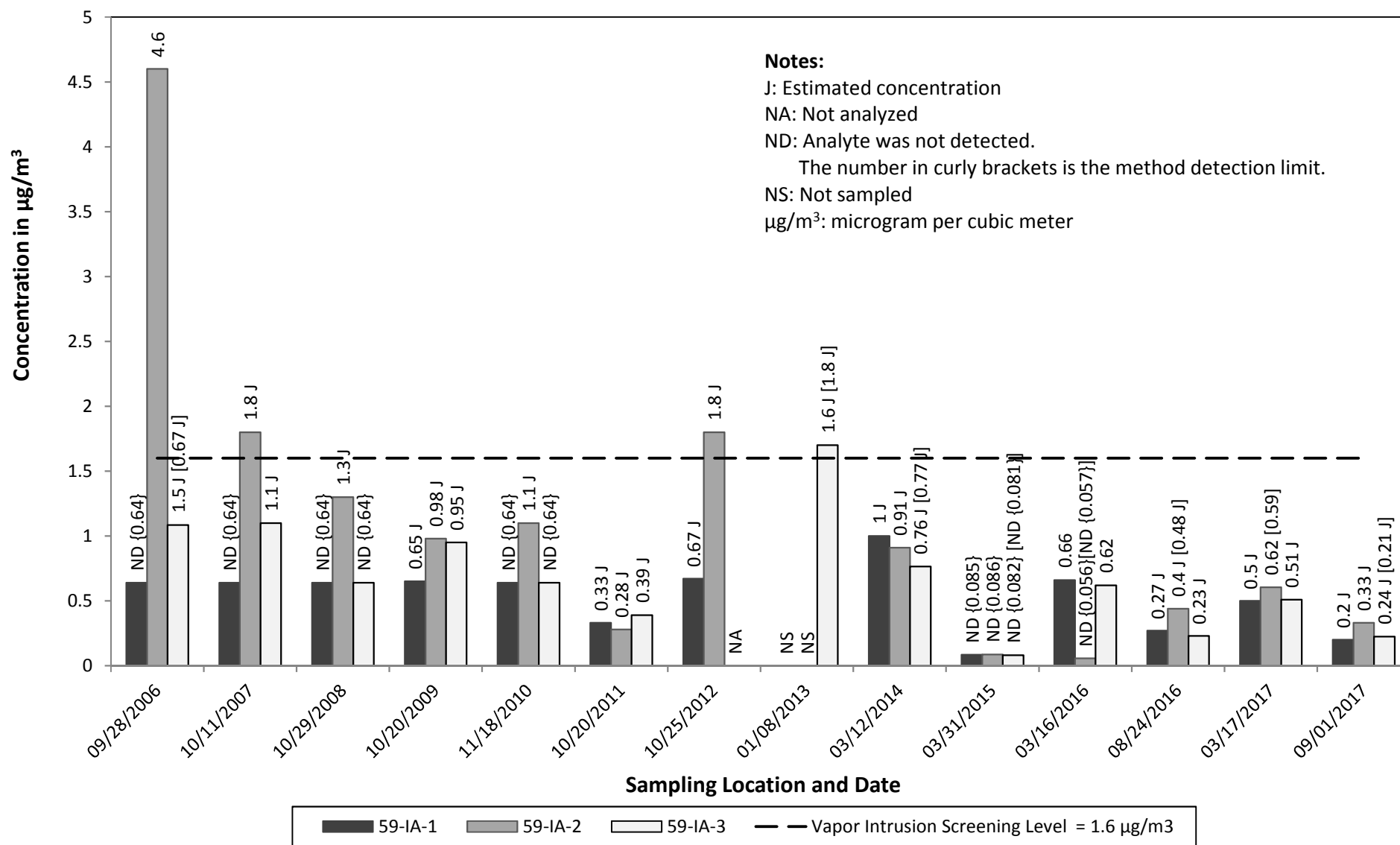
**Attachment F - Building 59 Indoor Air Data for
Acrolein**

**Sub-Slab Soil Gas and Indoor Air Investigation Summary
Report for Building 59 – Summer 2017
General Electric Company - Pittsfield, Massachusetts**



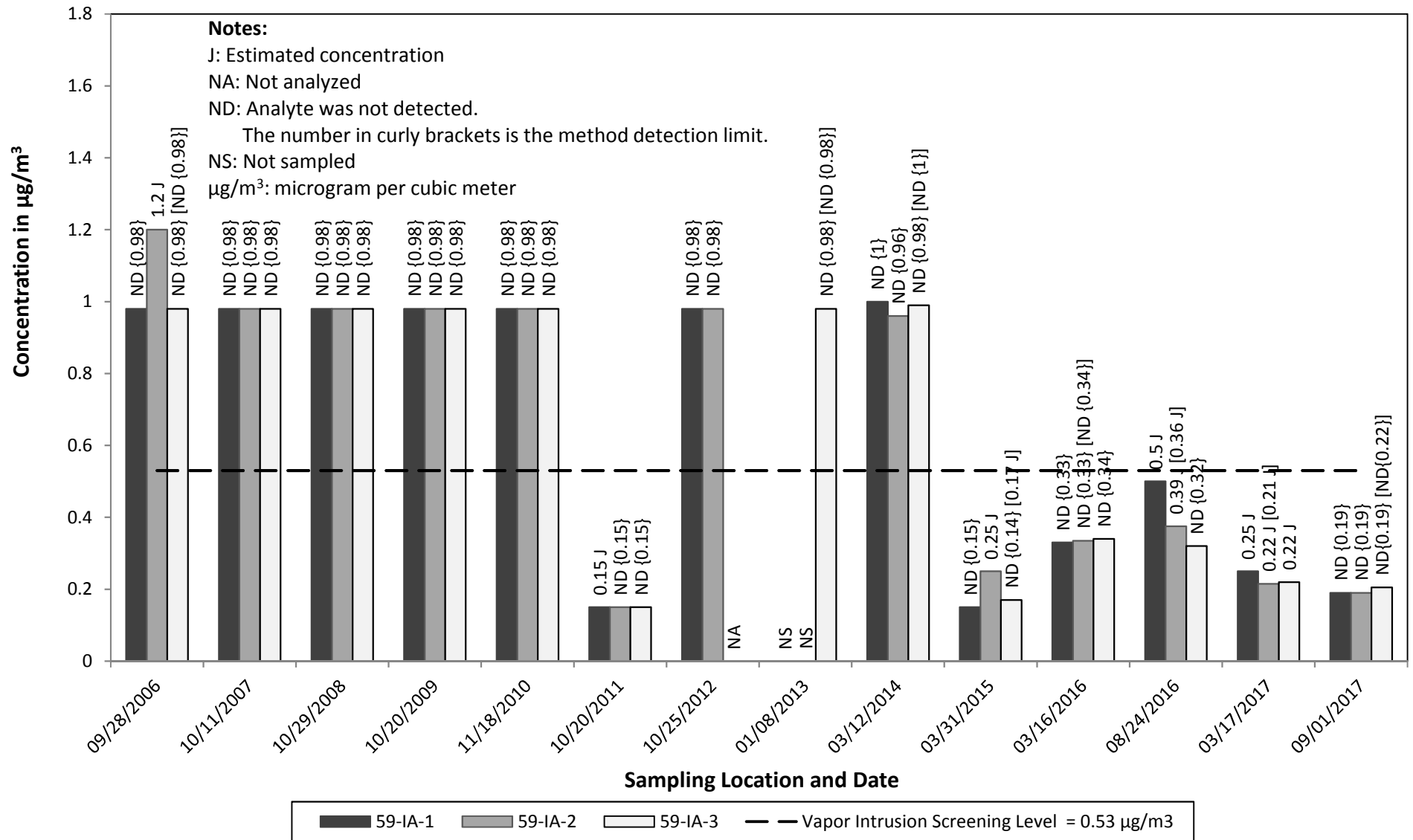
**Attachment F - Building 59 Indoor Air Data for
Benzene**

**Sub-Slab Soil Gas and Indoor Air Investigation Summary
Report for Building 59 – Summer 2017
General Electric Company - Pittsfield, Massachusetts**



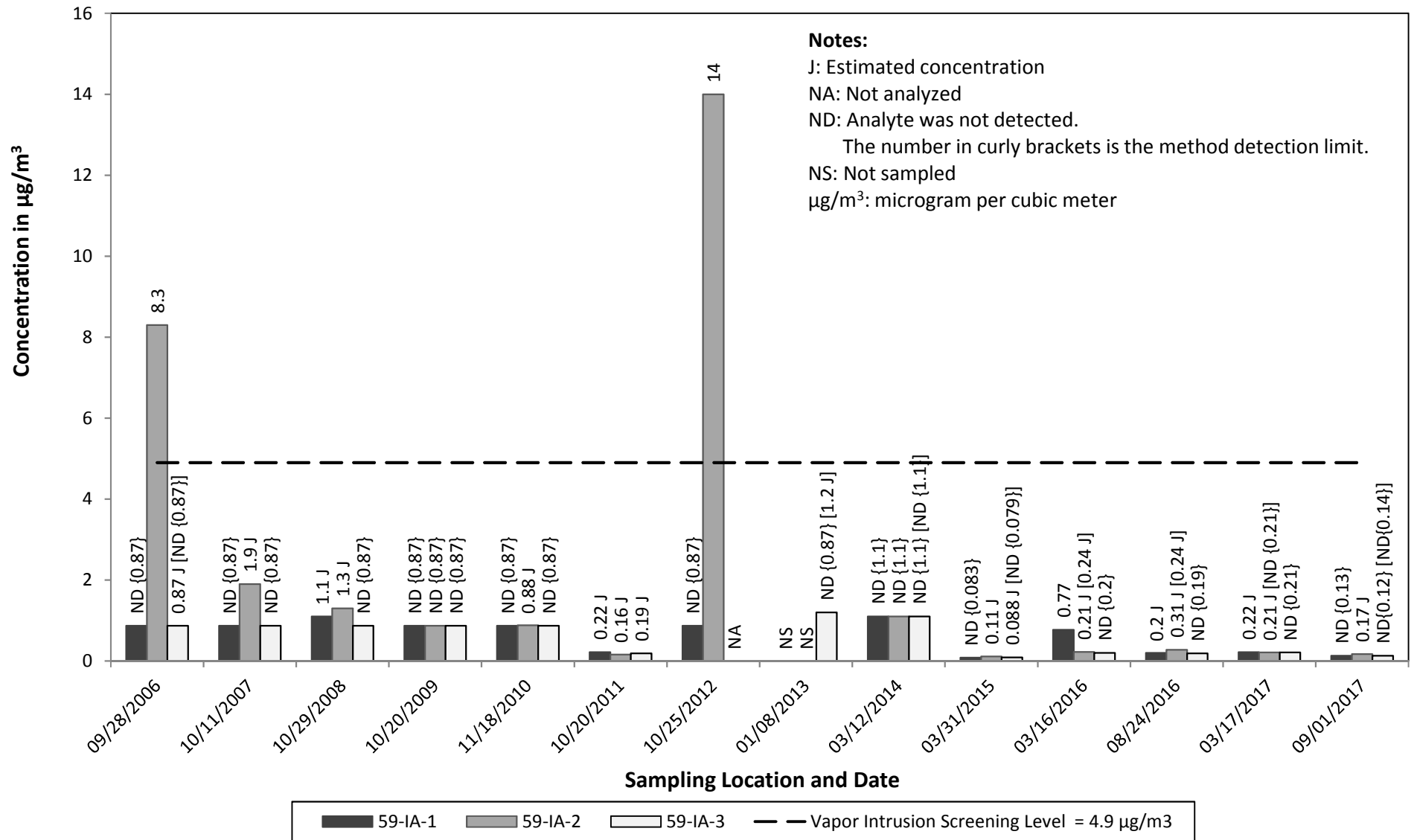
**Attachment F - Building 59 Indoor Air Data for
Chloroform**

**Sub-Slab Soil Gas and Indoor Air Investigation Summary
Report for Building 59 – Summer 2017
General Electric Company - Pittsfield, Massachusetts**



Attachment F - Building 59 Indoor Air Data for Ethylbenzene

**Sub-Slab Soil Gas and Indoor Air Investigation Summary
Report for Building 59 – Summer 2017
General Electric Company - Pittsfield, Massachusetts**

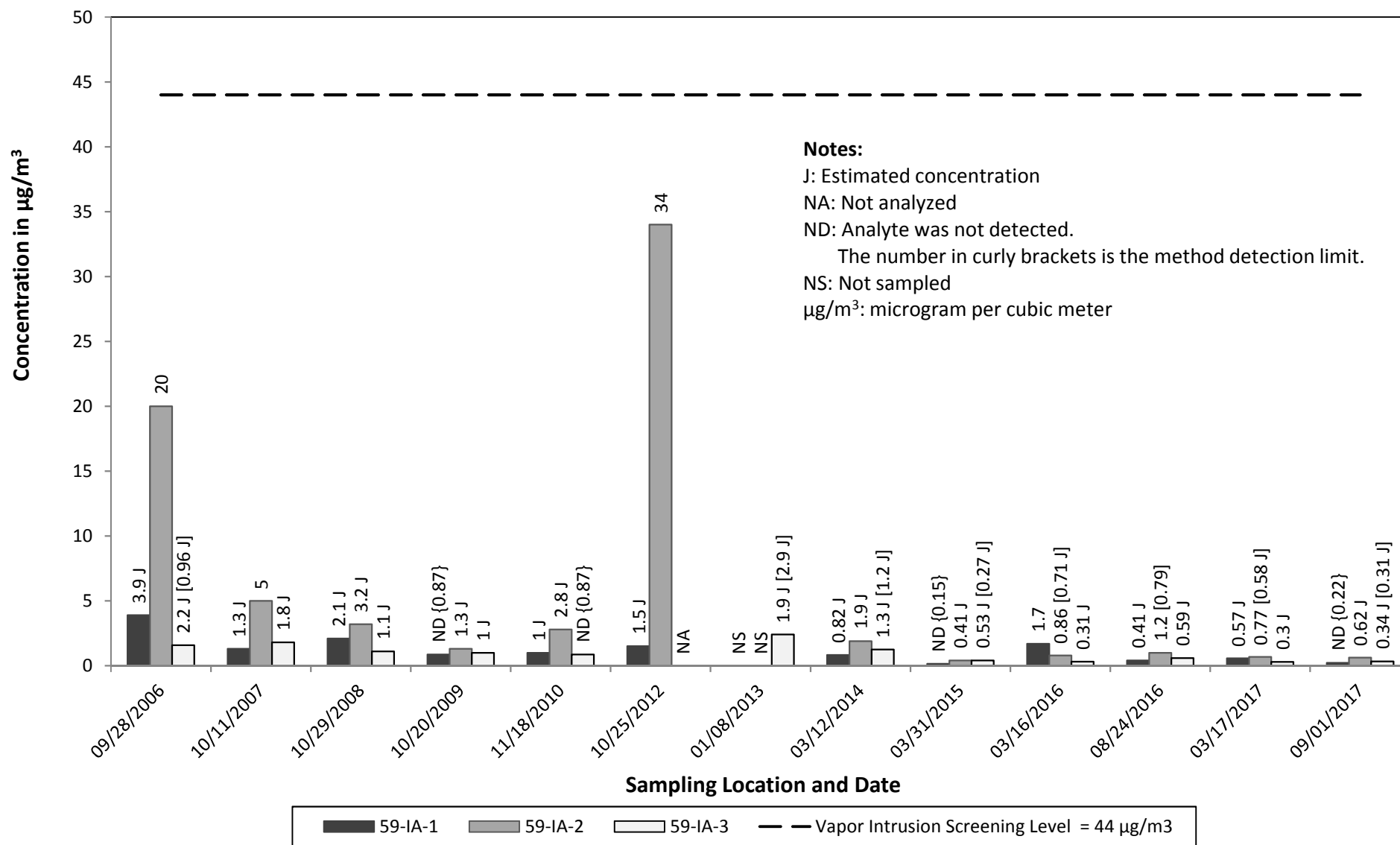


**Attachment F - Building 59 Indoor Air Data for
m&p-Xylene**

Sub-Slab Soil Gas and Indoor Air Investigation Summary

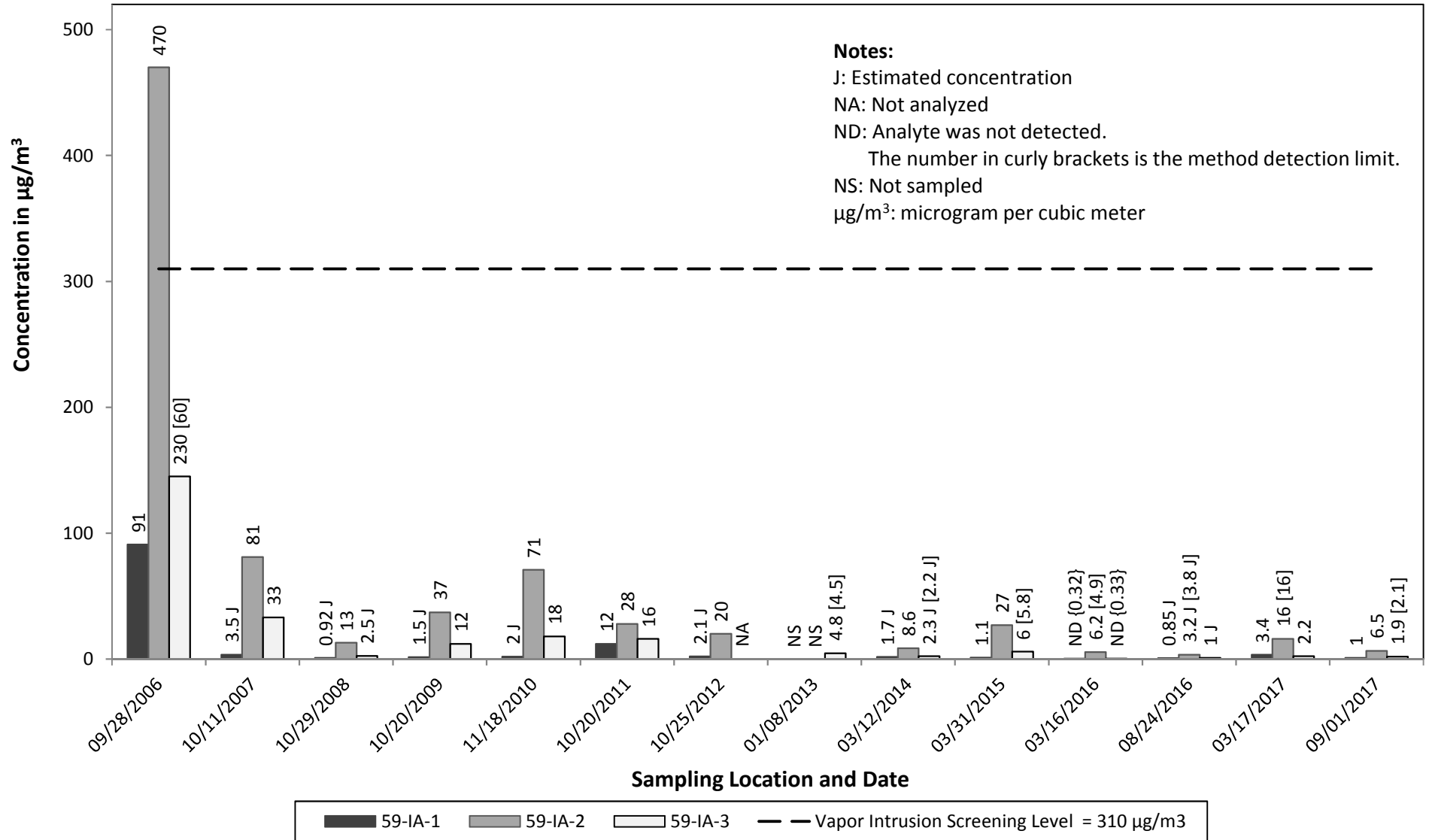
Report for Building 59 – Summer 2017

General Electric Company - Pittsfield, Massachusetts



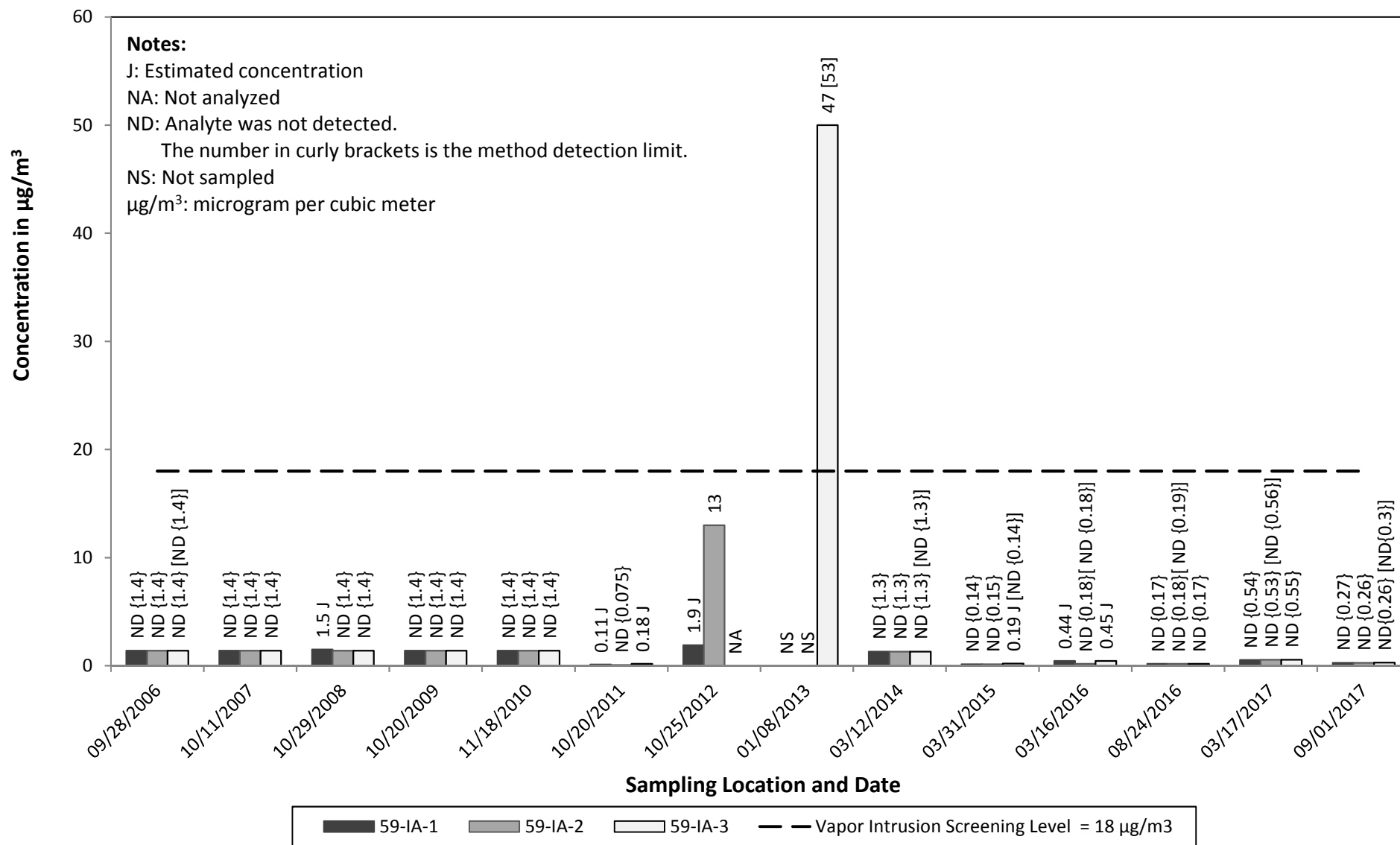
**Attachment F - Building 59 Indoor Air Data for
n-Hexane**

**Sub-Slab Soil Gas and Indoor Air Investigation Summary
Report for Building 59 – Summer 2017
General Electric Company - Pittsfield, Massachusetts**



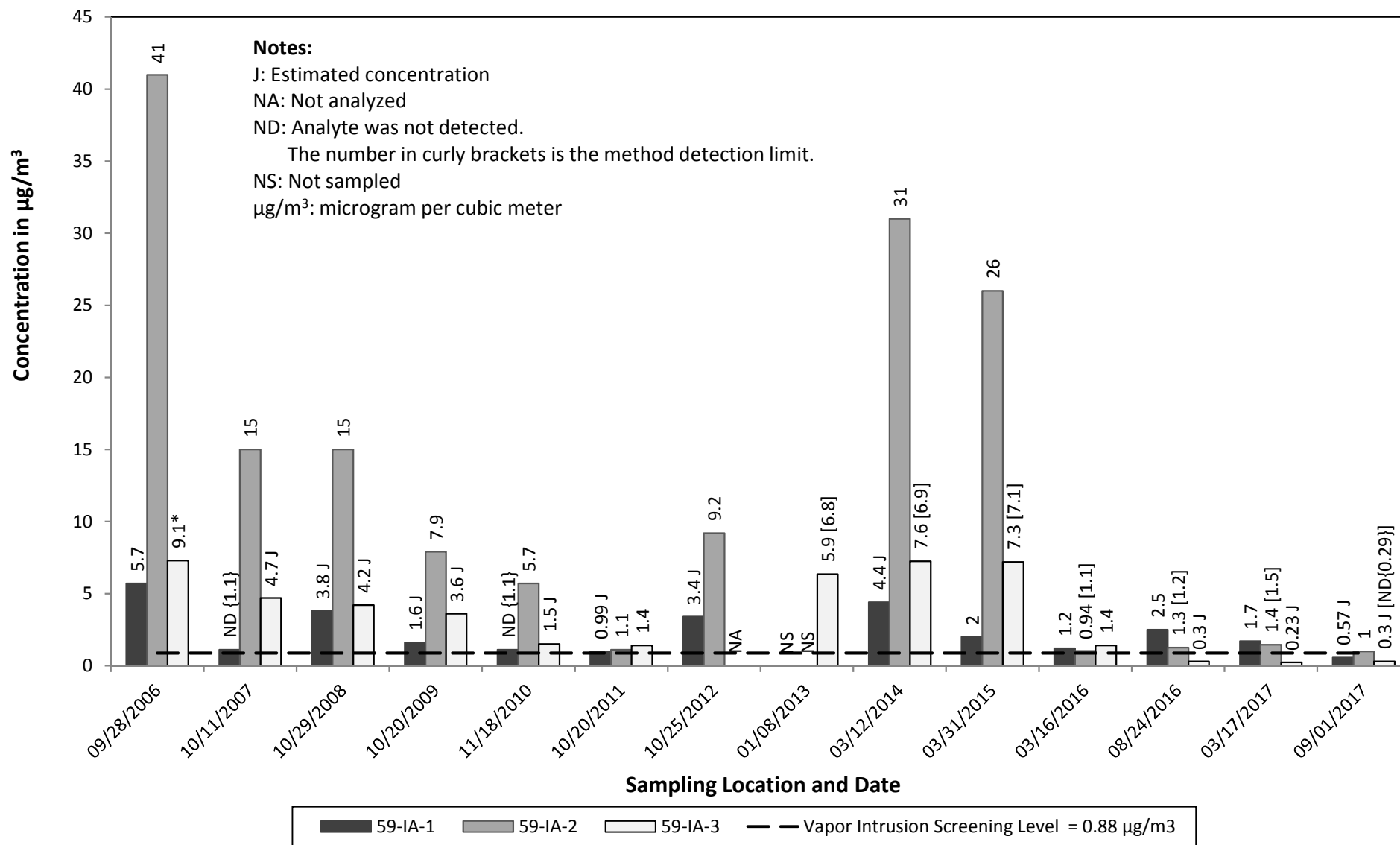
**Attachment F - Building 59 Indoor Air Data for
Tetrachloroethene**

**Sub-Slab Soil Gas and Indoor Air Investigation Summary
Report for Building 59 – Summer 2017
General Electric Company - Pittsfield, Massachusetts**



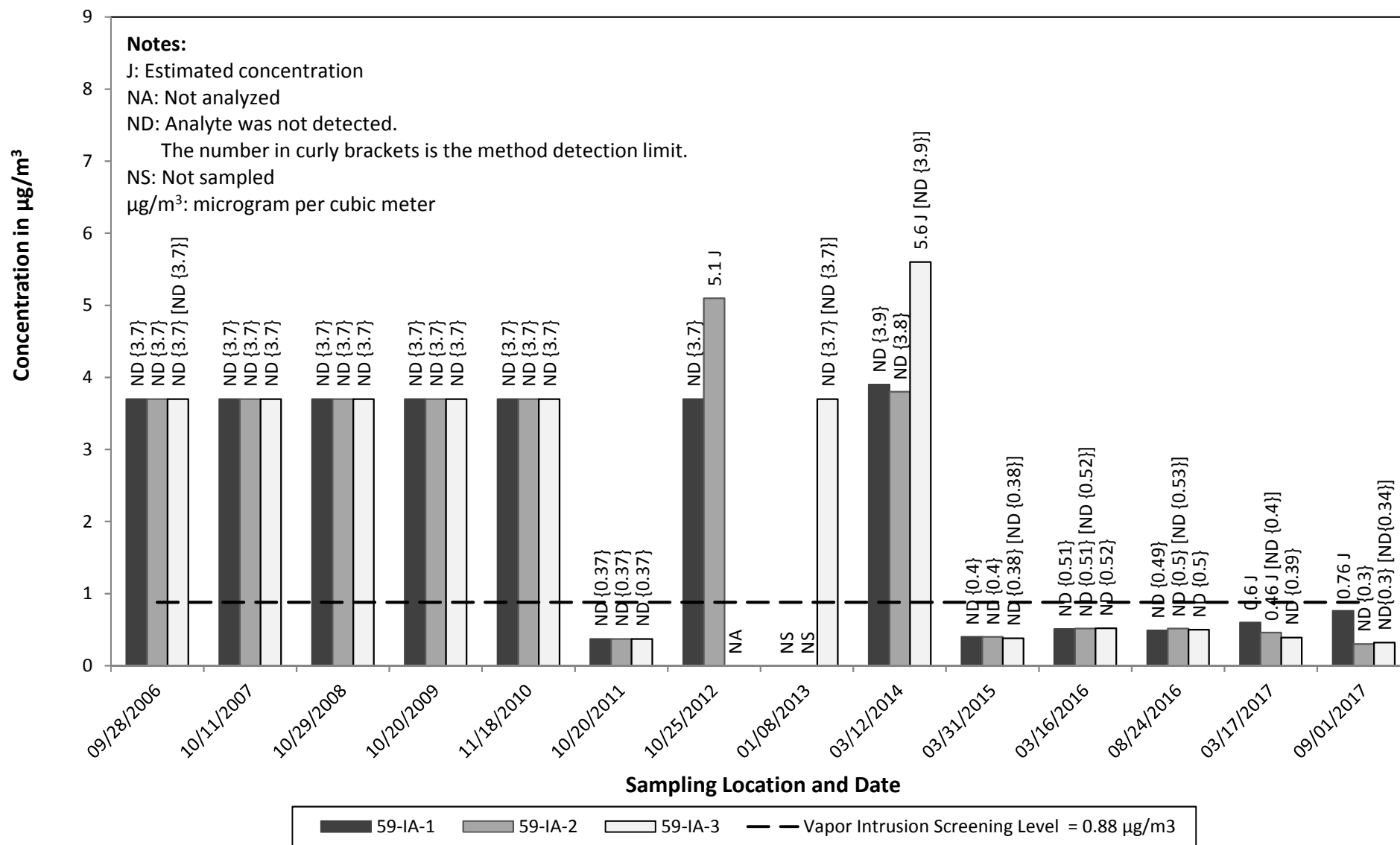
**Attachment F - Building 59 Indoor Air Data for
Trichloroethene**

**Sub-Slab Soil Gas and Indoor Air Investigation Summary
Report for Building 59 – Summer 2017
General Electric Company - Pittsfield, Massachusetts**



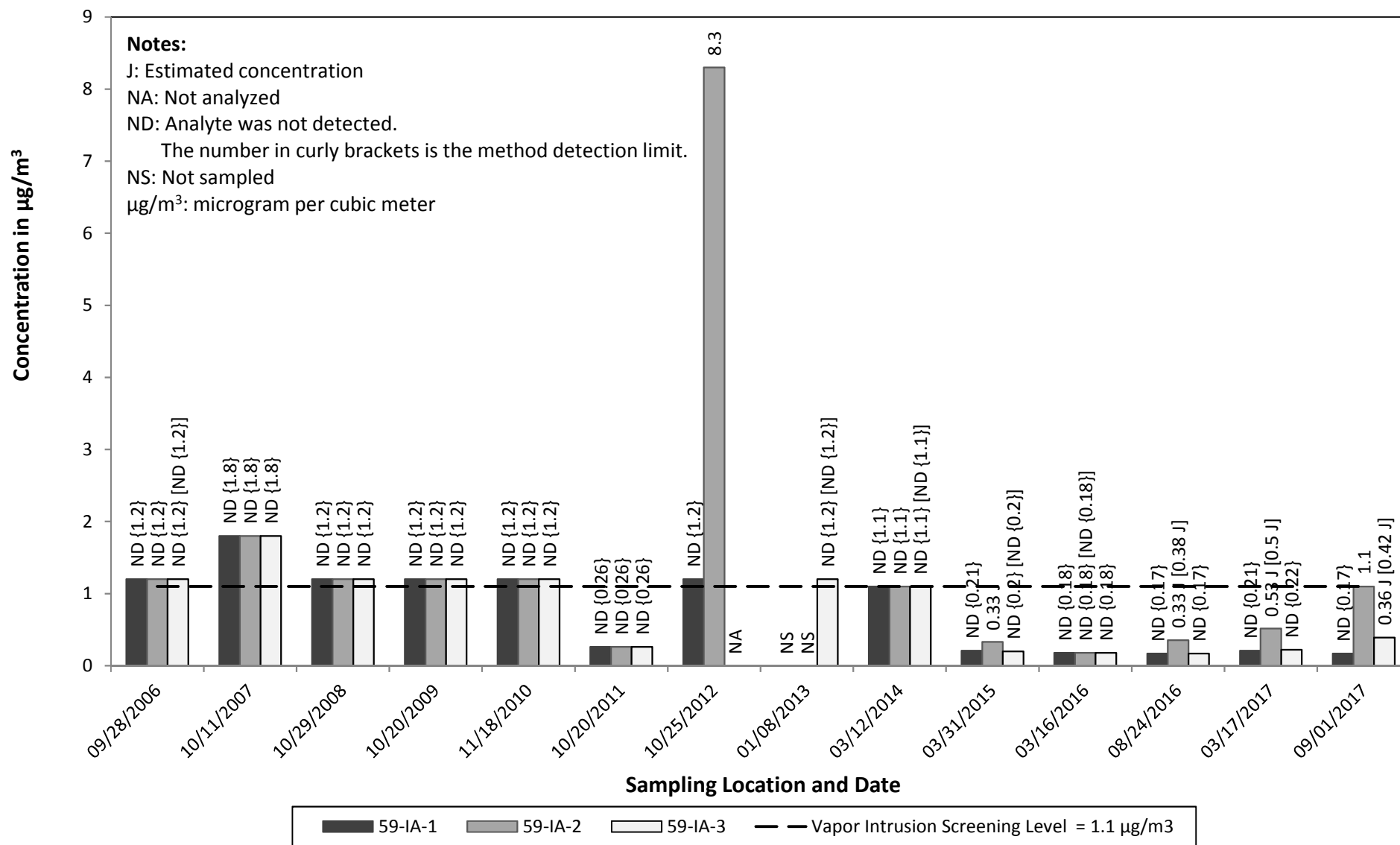
**Attachment F - Building 59 Indoor Air Data for
1,2,4-Trichlorobenzene**

**Sub-Slab Soil Gas and Indoor Air Investigation Summary
Report for Building 59 – Summer 2017
General Electric Company - Pittsfield, Massachusetts**



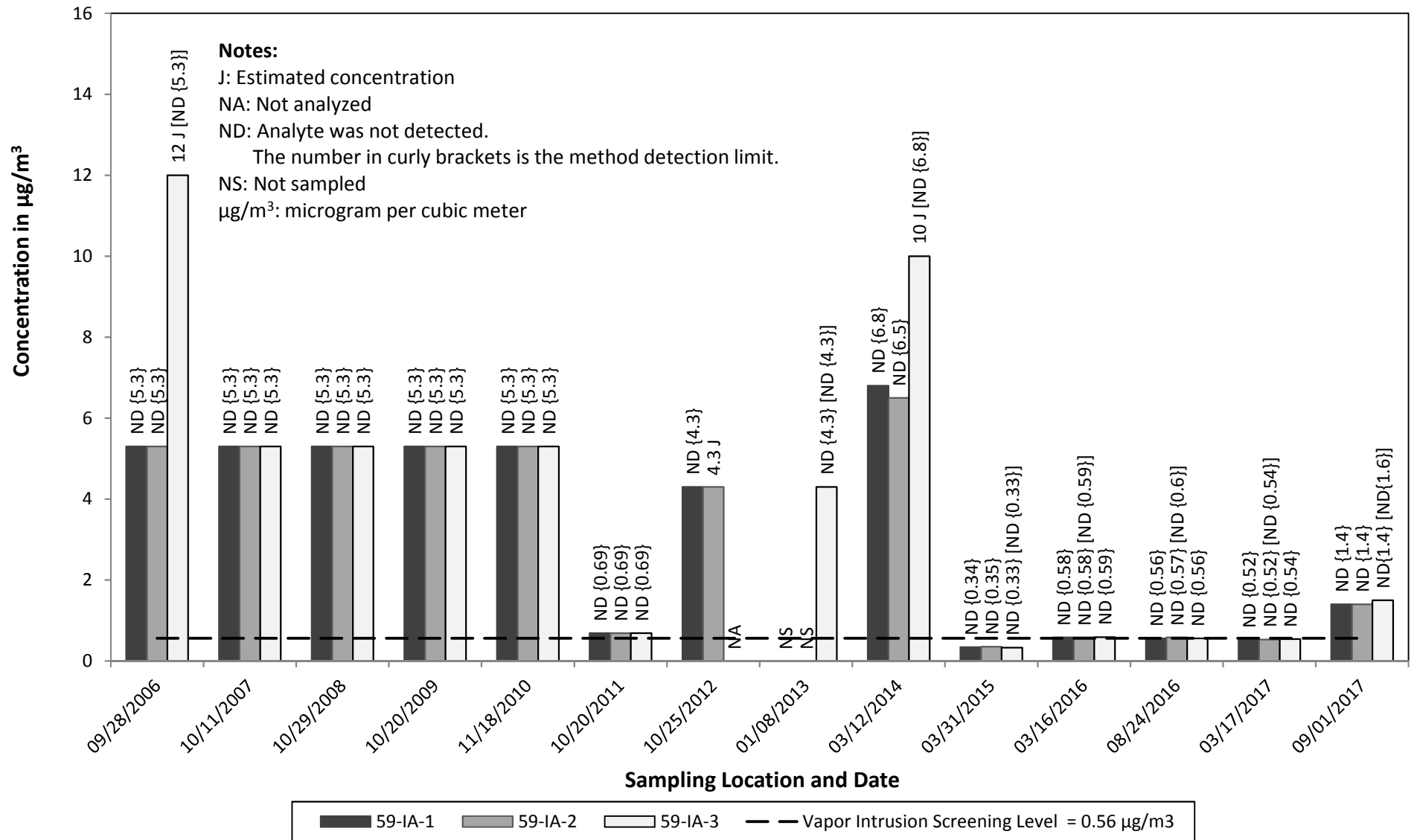
**Attachment F - Building 59 Indoor Air Data for
1,4-Dichlorobenzene**

**Sub-Slab Soil Gas and Indoor Air Investigation Summary
Report for Building 59 – Summer 2017
General Electric Company - Pittsfield, Massachusetts**



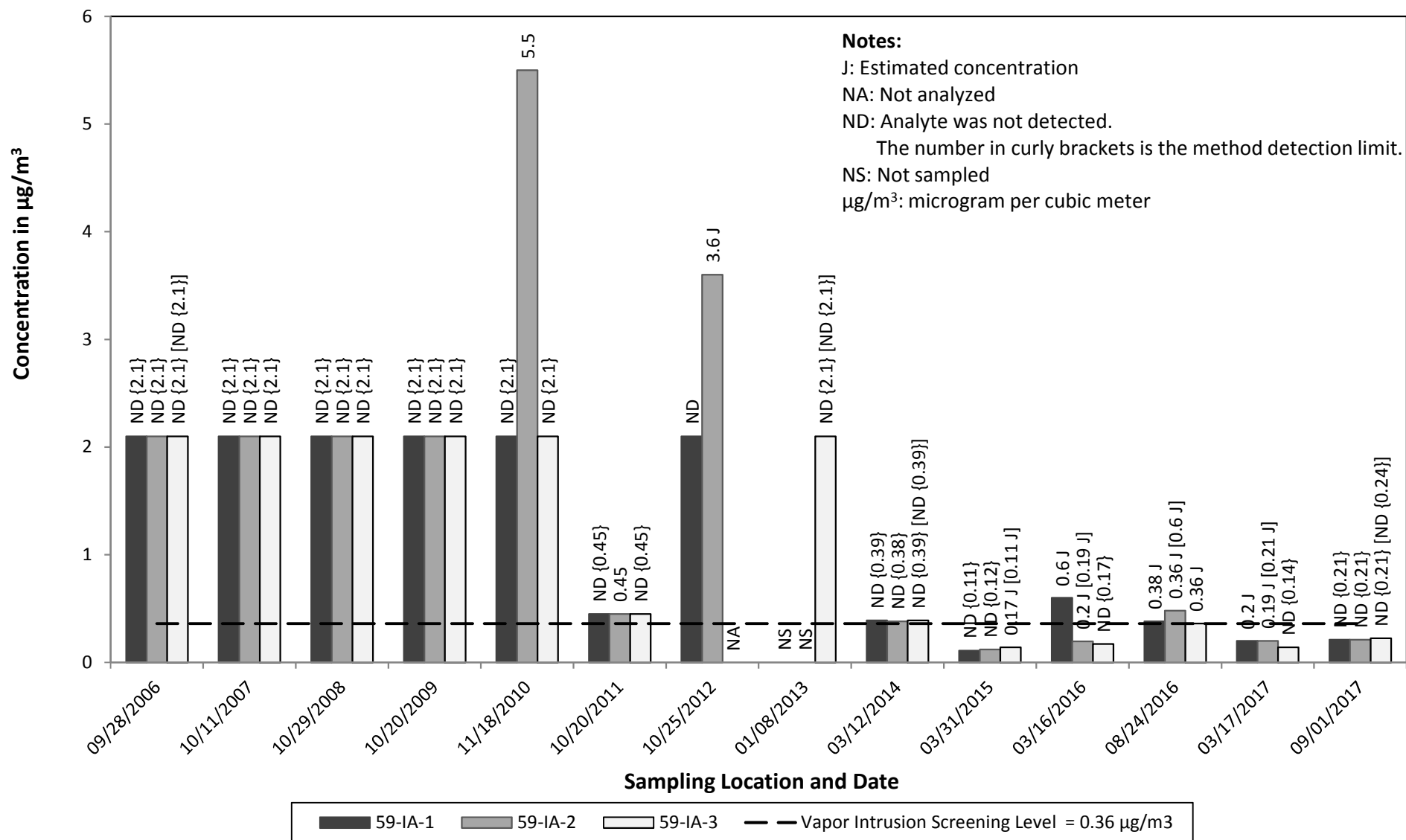
**Attachment F - Building 59 Indoor Air Data for
Hexachlorobutadiene**

**Sub-Slab Soil Gas and Indoor Air Investigation Summary
Report for Building 59 – Summer 2017
General Electric Company - Pittsfield, Massachusetts**



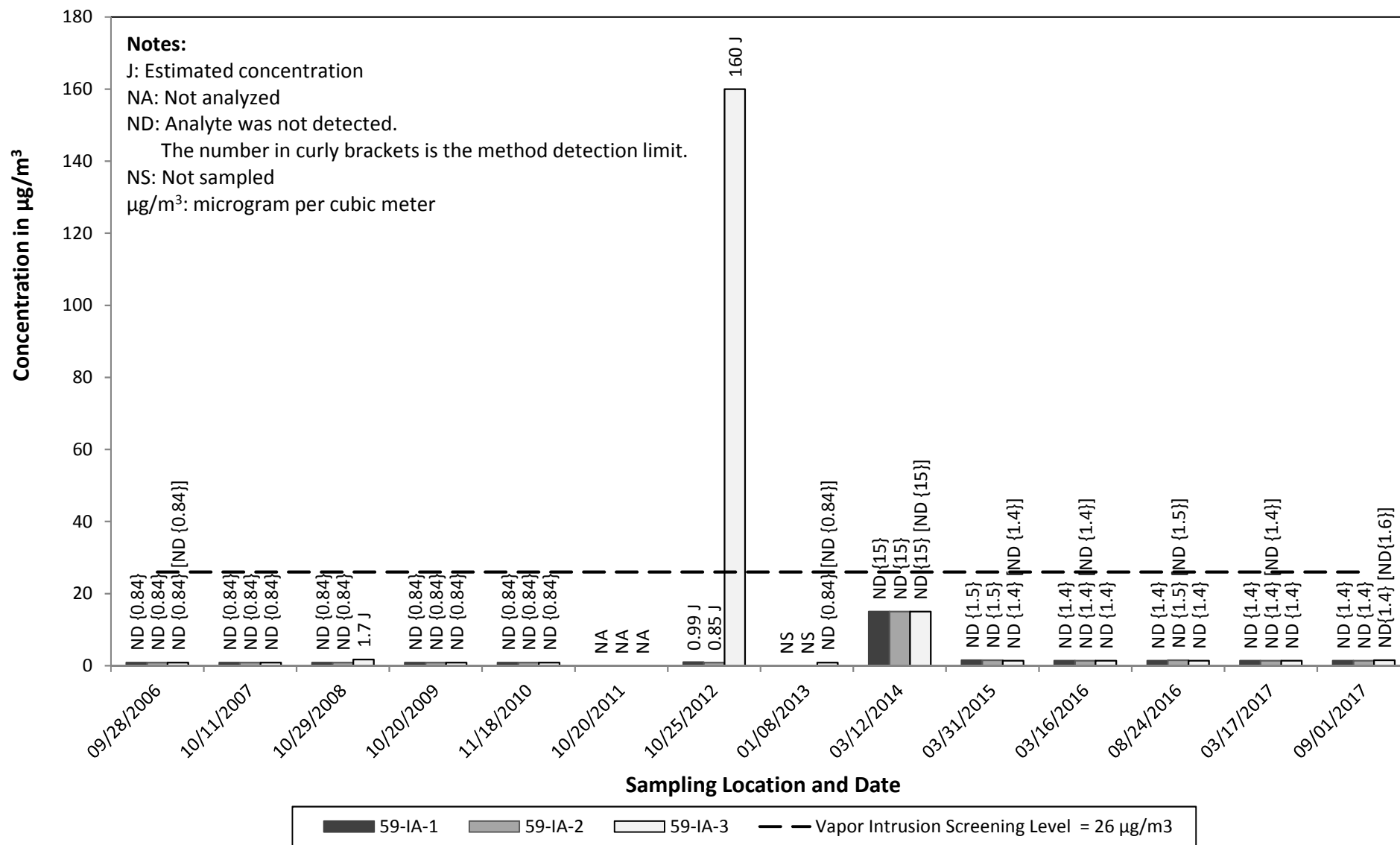
**Attachment F - Building 59 Indoor Air Data for
Naphthalene**

**Sub-Slab Soil Gas and Indoor Air Investigation Summary
Report for Building 59 – Summer 2017
General Electric Company - Pittsfield, Massachusetts**



**Attachment F - Building 59 Indoor Air Data for
Acetonitrile**

**Sub-Slab Soil Gas and Indoor Air Investigation Summary
Report for Building 59 – Summer 2017
General Electric Company - Pittsfield, Massachusetts**

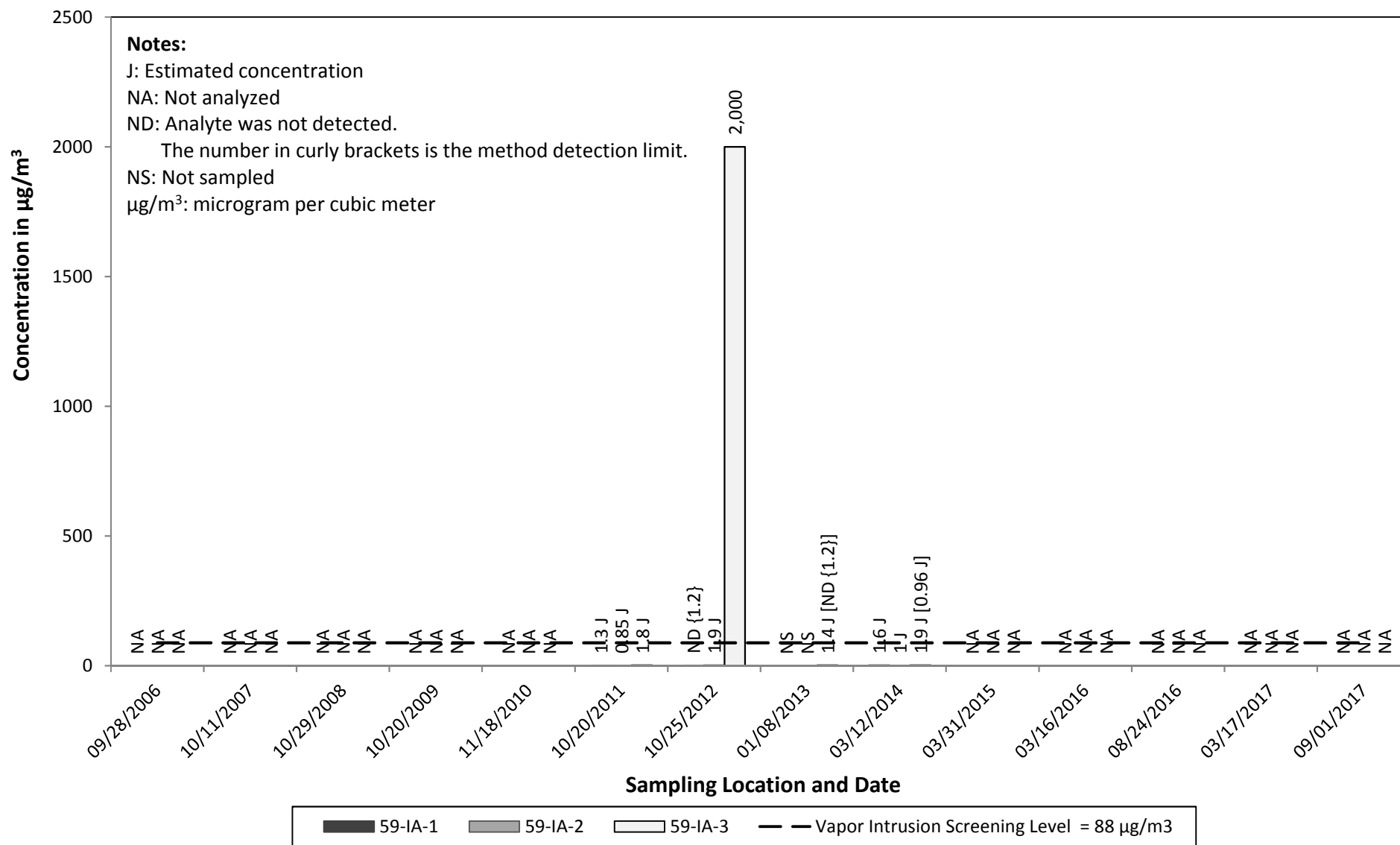


**Attachment F - Building 59 Indoor Air Data for
for Isopropyl alcohol**

Sub-Slab Soil Gas and Indoor Air Investigation Summary

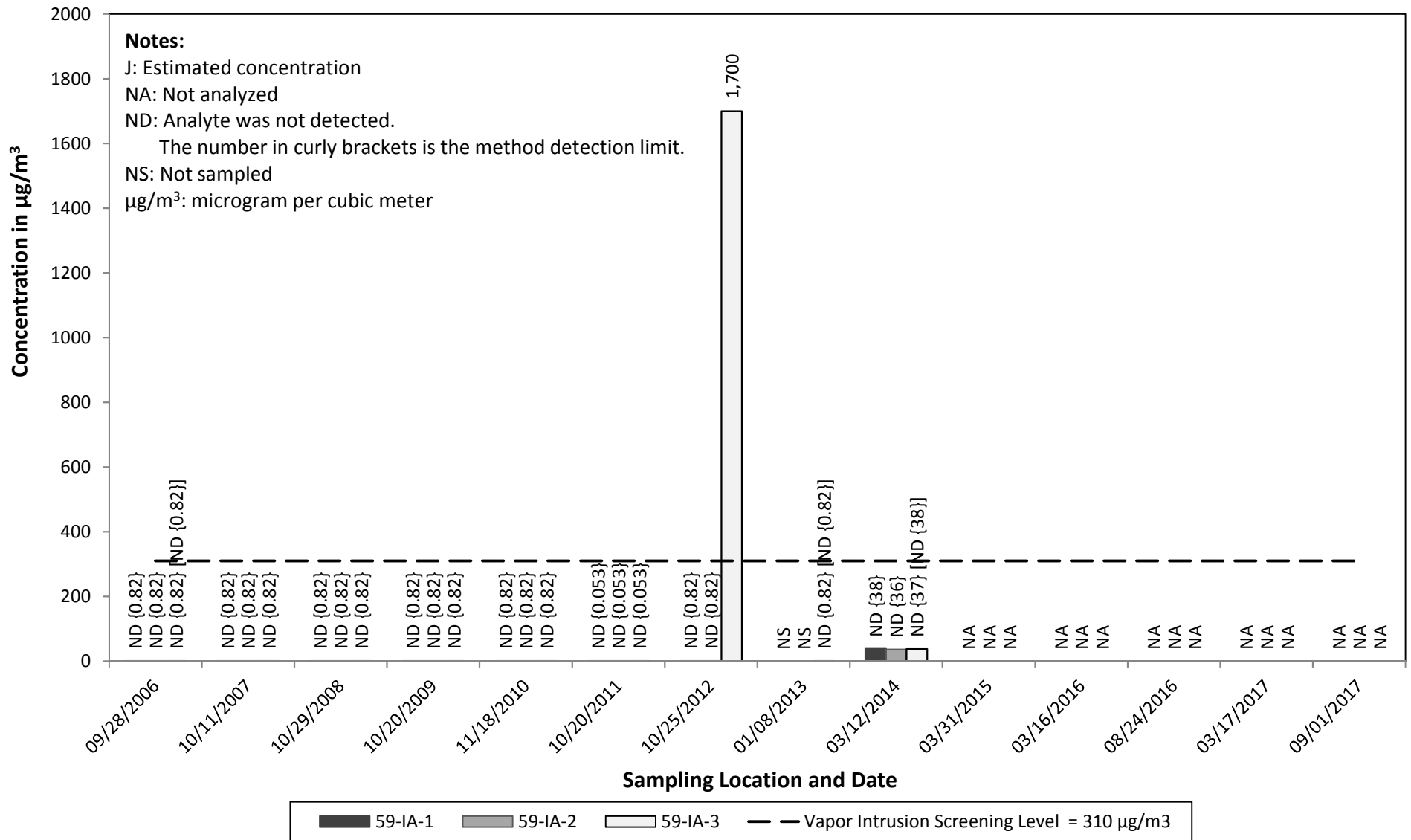
Report for Building 59 – Summer 2017

General Electric Company - Pittsfield, Massachusetts



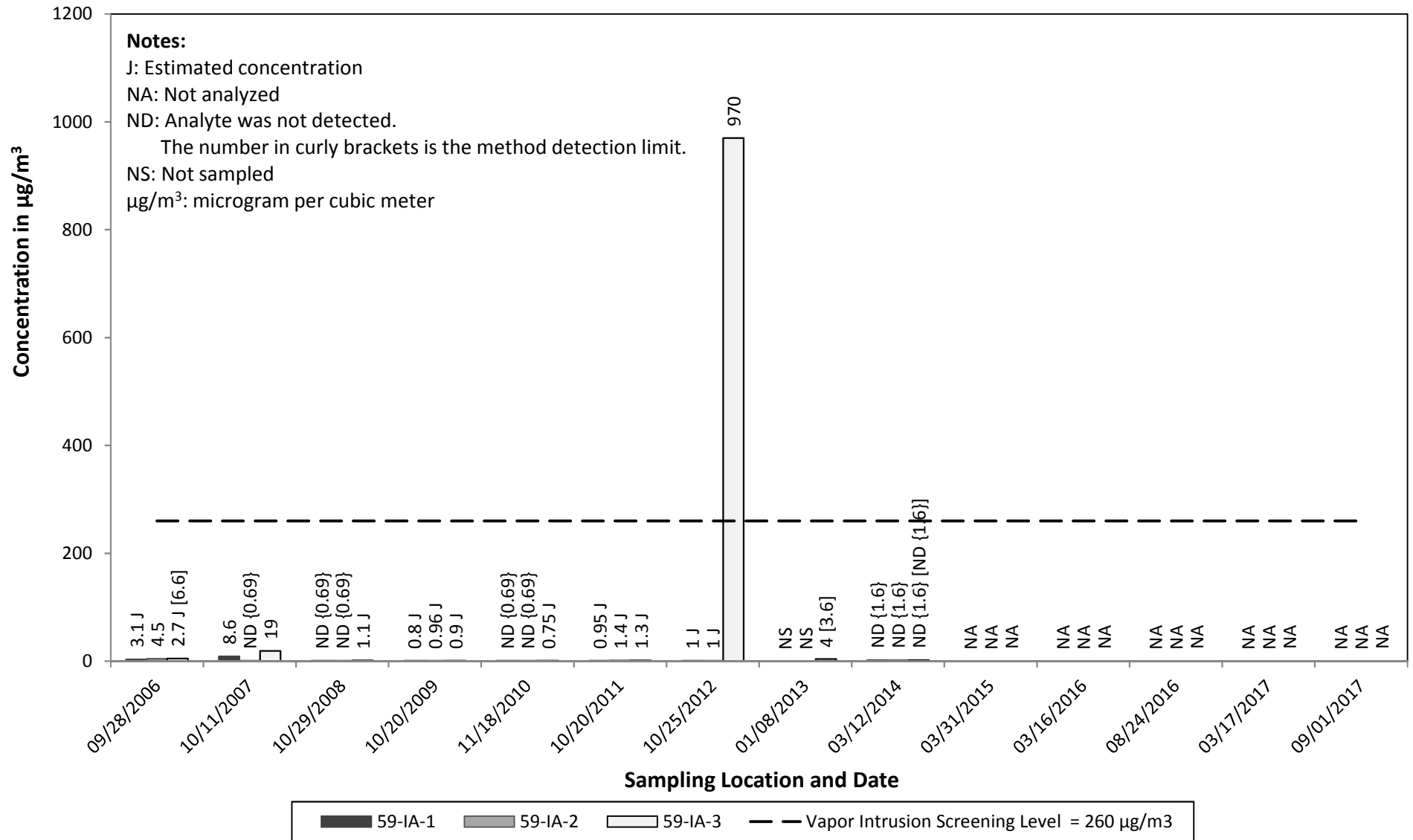
**Attachment F - Building 59 Indoor Air Data for
for Methyl Methacrylate**

**Sub-Slab Soil Gas and Indoor Air Investigation Summary
Report for Building 59 – Summer 2017
General Electric Company - Pittsfield, Massachusetts**



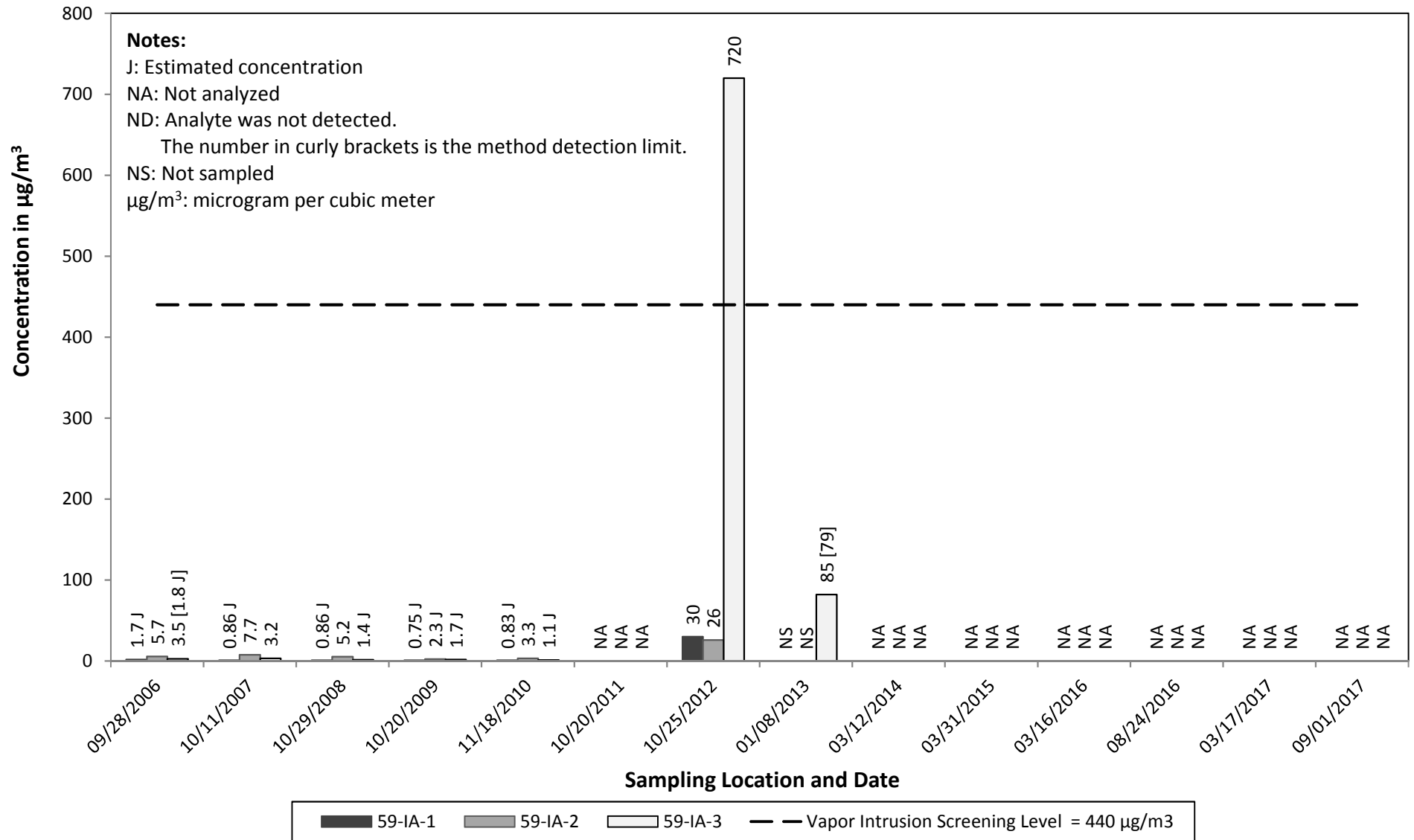
**Attachment F - Building 59 Indoor Air Data for
for Methylene Chloride**

**Sub-Slab Soil Gas and Indoor Air Investigation Summary
Report for Building 59 – Summer 2017
General Electric Company - Pittsfield, Massachusetts**



**Attachment F - Building 59 Indoor Air Data for
for Pentane**

**Sub-Slab Soil Gas and Indoor Air Investigation Summary
Report for Building 59 – Summer 2017
General Electric Company - Pittsfield, Massachusetts**

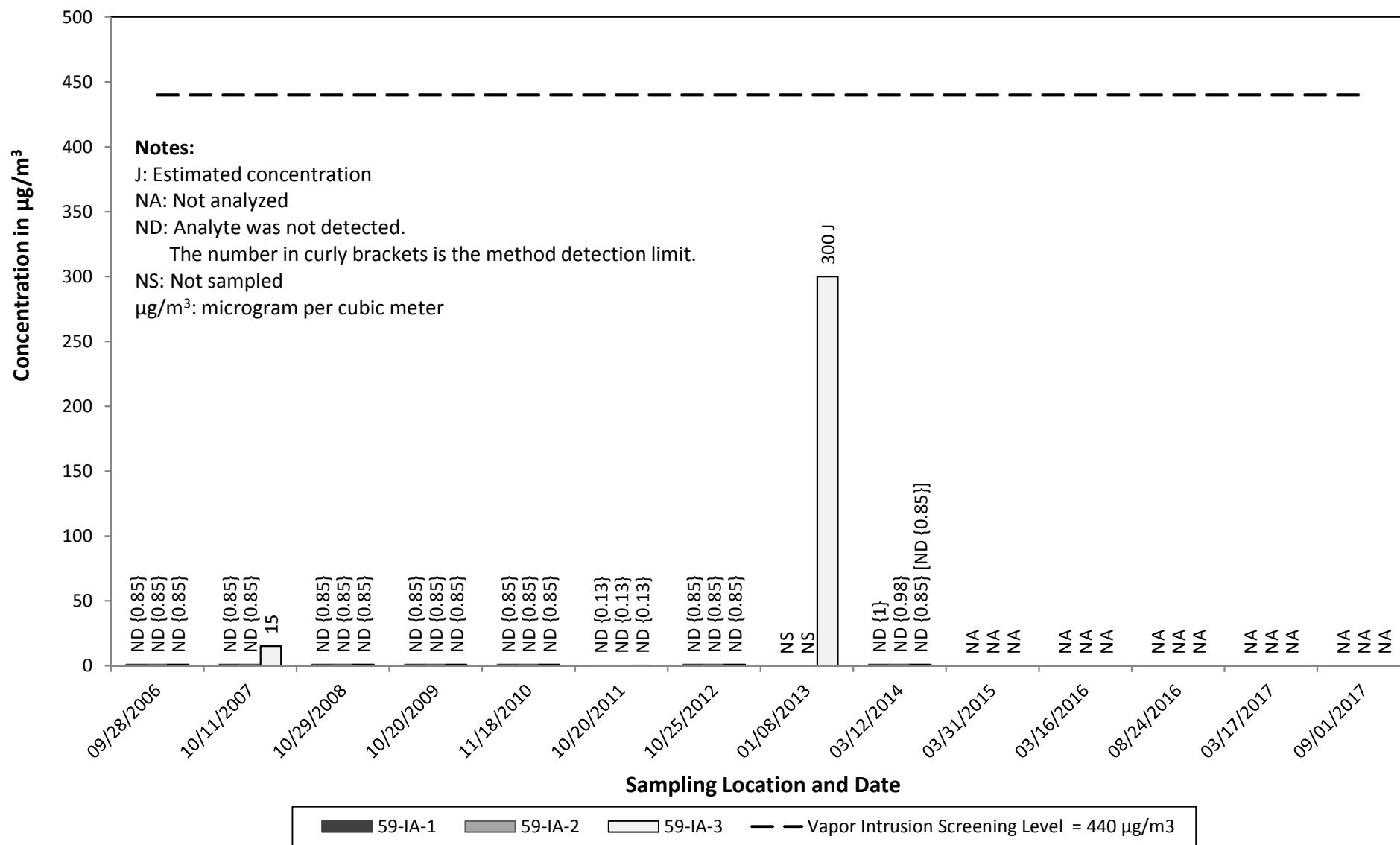


**Attachment F - Building 59 Indoor Air Data for
for Styrene**

Sub-Slab Soil Gas and Indoor Air Investigation Summary

Report for Building 59 – Summer 2017

General Electric Company - Pittsfield, Massachusetts



ATTACHMENT G

SSDS OM&M Field Logs and Data



Table G-1
Summary of SSDS Analytical Data for Building 59

Indoor Air Investigation and Assessment Summary Report for Building 59 – Summer 2017
Groundwater Management Area 3
General Electric Company - Pittsfield, Massachusetts
(Results are presented in ug/m3)

Location ID: Date Collected: Sample Name:	Units	Aggregate Pre-Dilution 11/30/16 Pre-Dilution	EFFLUENT 03/16/16 Effluent	EFFLUENT 05/06/16 Effluent	EFFLUENT 09/20/16 Effluent	EFFLUENT 11/30/16 Effluent	EFFLUENT 03/17/17 Effluent
Volatile Organics							
1,1,2,2-Tetrachloroethane	ug/m3	ND(30){3.8}	ND(41){5.5}	ND(5.3){0.71}	ND(2.5){0.34}	ND(12){2.8}	ND(11){2.6}
1,2,3-Trichloropropane	ug/m3	ND(100){100}	ND(140){140}	ND(23){4.6}	ND(11){2.2}	ND(52){4}	ND(48){3.8}
1,2,4-Trimethylbenzene	ug/m3	ND(22){2.7}	ND(29){3.6}	ND(3.8){0.84}	15	ND(8.5){1.6}	ND(7.9){1.5}
Acetonitrile	ug/m3	ND(73){73}	ND(3.8){3.8}	ND(6.5){6.5}	ND(3.1){3.1}	ND(14){14}	ND(14){14}
Acrolein	ug/m3	ND(0){0}	5.1 J	ND(8.8){8.8}	ND(4.2){4.2}	20 J	ND(21){21}
Benzene	ug/m3	ND(14){1.4}	1.9 J	1.5 J	1.4	4.3 J	ND(5.1){0.86}
Bromomethane	ug/m3	ND(170){10}	ND(230){13}	ND(15){2.5}	ND(7.1){1.2}	ND(34){4.6}	ND(31){4.3}
Carbon Disulfide	ug/m3	ND(54){7.1}	ND(74){4.9}	8 J	ND(5.7){1.6}	10 J	ND(25){4.3}
Chloroform	ug/m3	17 J	8.9 J	9.2	4.2	4.9 J	3.4 J
Ethyl acetate	ug/m3	ND(63){63}	ND(86){86}	16	8.7	ND(31){31}	ND(29){29}
Ethylbenzene	ug/m3	ND(19){2.8}	ND(26){5}	ND(3.3){0.89}	5	ND(7.5){2.1}	ND(7){2}
m&p-Xylene	ug/m3	ND(19){2.3}	ND(26){4.7}	1.1 J	25	ND(7.5){2.2}	ND(7){2}
Methyl tert-butyl ether	ug/m3	ND(63){2}	ND(21){3.7}	ND(2.8){0.73}	ND(1.3){0.35}	ND(6.2){1.3}	ND(5.8){1.2}
n-Hexane	ug/m3	ND(15){3.5}	ND(21){11}	1.7 J	3	16	54
o-Xylene	ug/m3	ND(19){3.6}	ND(26){3.6}	0.82 J	13	ND(7.5){0.98}	ND(7){0.91}
Tetrachloroethene	ug/m3	29 J	26 J	24	8.8	6.8 J	ND(11){5.2}
Toluene	ug/m3	2.8 J	ND(22){5}	3.7	63	12	ND(6.1){0.96}
Trichloroethene	ug/m3	9,500	8,200	8,800	2,600 D	2,400	1,500
Trichlorofluoromethane	ug/m3	15 J	9.4 J	8.4	63	12	15
Semivolatile Organics							
1,2,4-Trichlorobenzene	ug/m3	ND(130){41}	ND(180){18}	8.6 J	ND(14){1.1}	ND(64){4}	ND(60){3.8}
1,4-Dichlorobenzene	ug/m3	3.7 J	ND(36){4.2}	1 J	0.54 J	ND(10){2.2}	ND(9.7){2.1}
Hexachlorobutadiene	ug/m3	ND(190){49}	ND(250){29}	ND(41){2.6}	ND(20){1.3}	ND(92){5.5}	ND(86){5.1}
Naphthalene	ug/m3	ND(92){10}	ND(120){2.1}	ND(20){0.75}	5.3 J	ND(45){1.5}	ND(42){1.4}

Table G-1
Summary of SSDS Analytical Data for Building 59

Indoor Air Investigation and Assessment Summary Report for Building 59 – Summer 2017
Groundwater Management Area 3
General Electric Company - Pittsfield, Massachusetts
(Results are presented in ug/m3)

EFFLUENT 06/29/17 Effluent	EFFLUENT 09/01/17 EFFLUENT	SDS-1 03/16/16 SDS-1	SDS-1 08/24/16 SDS-1	SDS-1 11/30/16 SDS-1	SDS-1 03/17/17 SDS-1	SDS-1 06/29/17 SDS-1 - 062917	SDS-1 09/01/17 SDS-1
ND(12){2.8}	ND(11){2.3}	ND(76){10}	ND(11){1.5}	ND(1.4){0.33}	ND(37){6.6}	ND(22){4}	ND(37){6.6}
ND(52){4}	ND(49){12}	ND(270){270}	ND(49){9.8}	ND(6.2){0.48}	ND(130){130}	ND(78){0}	ND(130){0}
ND(8.4){1.6}	ND(8){1}	ND(55){6.8}	ND(8.1 J){1.8}	0.27 J	ND(26){4.4}	ND(16){2.6}	ND(26){4.4}
ND(14){0}	ND(14){0}	ND(7){7}	ND(14){14}	ND(1.7){1.7}	ND(91){91}	ND(54){0}	ND(91){0}
ND(20){0}	ND(18){0}	9.6 J	ND(19){19}	2.4 J	NA	ND(0){0}	NA
ND(5.5){0.92}	ND(5.2){0.98}	ND(36){3.4}	1.8 J	1.4	ND(17){1.5}	1.5 J	ND(17){1.5}
ND(33){4.6}	ND(31){5.8}	ND(430){24}	ND(32){5.4}	ND(4){0.55}	ND(210){32}	ND(130){19}	ND(210){32}
5.8 J	ND(25){2.8}	ND(140){9.2}	ND(26){7}	1.6 J	ND(67){5.9}	ND(40){3.6}	6.3 J
3.4 J	4.4 J	19 J	14	0.89 J	8 J	8.2 J	12 J
ND(31){4.8}	ND(29){9.9}	ND(160){160}	ND(30){30}	4.3	ND(78){78}	ND(47){0}	ND(78){0}
ND(7.5){2.1}	ND(7){1.2}	ND(48){9.4}	ND(7.1){1.9}	ND(0.89){0.25}	ND(23){4.3}	ND(14){2.6}	ND(23){4.3}
ND(7.5){2.1}	ND(7){2.1}	ND(48){8.9}	1.8 J	0.75 J	ND(23){3.4}	ND(14){2}	ND(23){3.4}
ND(6.2){1.3}	ND(5.8){1.8}	ND(40){7}	ND(5.9){1.6}	ND(0.74){0.15}	ND(78){5.9}	ND(47){3.6}	ND(78){5.9}
48	12	ND(39){21}	ND(5.8 J){3.2}	3.7	ND(19){3.8}	15	ND(19){3.8}
ND(7.5){0.97}	ND(7){1.8}	ND(48){6.8}	ND(7.1){1.6}	0.26 J	ND(23){4.1}	ND(14){2.5}	ND(23){4.1}
6.4 J	10 J	44 J	58	1.3 J	18 J	28	32 J
9.1	17	ND(42){9.4}	2.8 J	4.3	2.4 J	2.5 J	5 J
1,400	2,100	15,000	10,000 D	310	6,500	5,900	8,100
50	62	ND(63){11}	44	8.1	18 J	32	48
ND(64){4}	ND(60){3}	ND(330){34}	ND(61){5}	ND(7.6){0.48}	ND(160){4.6}	ND(96){2.8}	ND(160){4.6}
ND(10){2.2}	ND(9.7){1.6}	ND(67){7.9}	3.4 J	0.49 J	ND(32){3.6}	ND(20){2.2}	ND(32){3.6}
ND(92){5.5}	ND(86){14}	ND(480){55}	ND(87){5.7}	ND(11){0.65}	ND(230){12}	ND(140){7.1}	ND(230){12}
ND(45 J){1.5}	ND(42){2.1}	ND(230){4}	ND(43){1.6}	ND(5.4){0.17}	ND(110){1.2}	ND(68 J){0.74}	ND(57){1.2}

Table G-1
Summary of SSDS Analytical Data for Building 59

Indoor Air Investigation and Assessment Summary Report for Building 59 – Summer 2017
Groundwater Management Area 3
General Electric Company - Pittsfield, Massachusetts
(Results are presented in ug/m3)

SDS-2 05/06/16 SDS-2 050616	SDS-2 08/24/16 SDS-2	SDS-2 11/30/16 SDS-2	SDS-2 03/17/17 SDS-2	SDS-2 06/29/17 SDS-2 - 062917	SDS-2 09/01/17 SDS-2
ND(5.7){0.77}	ND(4){0.54}	ND(11){2.6}	ND(16){2.8}	ND(12){2.7}	ND(15){2.7}
ND(25){5}	ND(18){3.5}	ND(48){3.8}	ND(56){56}	ND(51){3.9}	ND(54){0}
ND(4.1){0.91}	ND(2.9 J){0.65}	ND(7.9){1.5}	ND(11){1.9}	ND(8.2){1.6}	ND(11){1.8}
ND(7){7}	ND(4.9){4.9}	ND(14){14}	ND(39){39}	ND(14){0}	ND(37){0}
ND(9.5){9.5}	ND(6.8){6.8}	18 J	NA	ND(19){0}	NA
1 J	1.2 J	3.4 J	ND(7.4){0.64}	1.1 J	1.6 J
ND(16){2.7}	ND(11){1.9}	ND(31){4.3}	ND(90){14}	ND(33){4.5}	ND(87){13}
6.8 J	ND(9.2){2.5}	11 J	ND(29){2.5}	4.6 J	4.6 J
58	47	41	31	31	51
ND(15){15}	ND(11){11}	ND(29){29}	ND(33){33}	ND(30){4.7}	ND(32){0}
ND(3.6){0.96}	ND(2.6){0.68}	ND(7){2}	ND(10){1.8}	ND(7.3){2.1}	ND(9.7){1.8}
ND(3.6){0.72}	0.69 J	ND(7){2}	ND(10){1.4}	ND(7.3){2.1}	ND(9.7){1.4}
ND(3){0.79}	ND(2.1){0.56}	ND(5.8){1.2}	ND(33){2.5}	ND(6){1.2}	ND(32){2.4}
ND(2.9){1.6}	1.4 J	ND(5.7){1.3}	4.1 J	8.4	ND(7.8){1.6}
ND(3.6){0.83}	ND(2.6){0.59}	ND(7){0.91}	ND(10){1.8}	ND(7.3){0.95}	ND(9.7){1.7}
6.9	7.6	6.2 J	4.7 J	ND(11){5.5}	7 J
ND(3.1){0.6}	1.6 J	2.6 J	2 J	1.5 J	1.9 J
7,900	4,000 D	3,400	2,700	2,700	3,900
9.2	37	9.7	12 J	27	27
ND(31){2.5}	ND(22){1.8}	ND(60){3.8}	ND(69){2}	ND(62){3.9}	ND(66){1.9}
ND(5){0.86}	ND(3.5){0.61}	ND(9.7){2.1}	ND(14){1.6}	ND(10){2.2}	ND(13){1.5}
ND(44){2.9}	ND(31){2}	ND(86){5.1}	ND(99){5.1}	ND(90){5.3}	ND(95){4.9}
ND(22){0.81}	ND(15){0.57}	ND(42){1.4}	ND(48){0.53}	ND(44 J){1.4}	ND(23){0.51}

Notes:

1. Samples were collected by ARCADIS and submitted for analysis of the above-listed VOCs and SVOCs by EPA Method TO-15 to Eurofins-Air Toxics Laboratory in Folsom, California.
2. Sample results have been validated in accordance with GE's approved Field Sampling Plan/Quality Assurance Project Plan (July 2013).
3. ND – Analyte was not detected. The number in parentheses is the associated reporting limit. The number in curly brackets is the method detection limit.
4. D- Indicates the sample was diluted due to an elevated constituent concentration.
5. J - Indicates that the associated numerical value is an estimated value.
6. $\mu\text{g}/\text{m}^3$ = micrograms per cubic meter

Attachment G-2
Estimate of Mass Removed - Building 59

Indoor Air Investigation and Assessment Summary Report for Building 59 – Summer 2017
Groundwater Management Area 3
General Electric Company - Pittsfield, Massachusetts

Date	Total VOC Concentration ¹	Approximate System Flow Rate	Emission Rate ²	Mass Removed	Maximum Mass Removed per Year ³
	µg/m ³	cfm	lb/hr	lb/day	lb
Building 59 - March 16, 2016	8,594	75	0.0024	0.0579	21.133
Building 59 - May 16, 2016	8,913	75	0.0025	0.0600	21.917
Building 59 - August 24, 2016	2,831	40	0.0004	0.0102	3.713
Building 59 - November 30, 2016	2,564	75	0.0007	0.0173	6.305
Building 59 - March 17, 2017	1,678	50	0.0003	0.0075	2.751
Building 59 - June 29, 2017	1,595	50	0.0003	0.007	2.615
Building 59 - Sept. 1, 2017	2,300	50	0.0004	0.010	3.770

Notes:

¹ Total VOC concentration was based on the sum of all detected analyte concentrations in the effluent sample by building for the date shown. When compounds are not detected above the laboratory reporting limit, emissions are calculated using the method detection limit(MDL).

² Emission rates were determined using the following equation:

$$\text{Emission Rate} = \text{Influent Conc.} * \text{Flow Rate} * 60 \text{ min/hr} * (1 \text{ m}^3/35.31 \text{ ft}^3) * (1 \text{ lb}/4.54 \times 10^8 \text{ ug})$$

³ Worst case calculation, based on initial sample results. Subsequent effluent sample results presented in Table 2 indicate decreasing effluent VOC concentrations.

cfm Cubic feet per minute.
lb/day Pounds per day.
lb/hr Pounds per hour.
µg/m³ Micrograms per cubic meter.
VOC Volatile organic compound.

General Electric Company, Pittsfield, Massachusetts
Building 59 Sub-Slab Depressurization System
Performance Monitoring Log

Date: 9/1/2017
Time: 8:45
Technician: N. Smith

System Status	YES	NO	Notes
Is blower running?	☒	☐	
Was monthly OM&M Log Sheet completed?	☒	☐	
Was instantaneous sub-slab differential pressure monitoring conducted?	☒	☐	
Was air sampling conducted?	☒	☐	
Was 24-hour continuous differential pressure monitoring conducted?	☐	☒	Annual (4th Quarter 2017)

Instantaneous Sub-Slab Differential Pressure Monitoring

Vacuum Monitoring Point	Differential Pressure (in w.c.) [use negative sign to indicate vacuum]
VMP-1	-0.249
VMP-2	-0.232
VMP-3	-0.424
VMP-4	-0.052
VMP-5	-0.020
VMP-6	-0.053
VMP-7	-1.812
VMP-8	-0.183
VMP-9	-0.234
VMP-10	-0.084

Indicate the following conditions:

Indoor air temperature (°F)*	76.1
Indoor air pressure (in Hg)*	30.06" Hg
Outdoor air temperature (°F)	60.9
Atmospheric pressure (in Hg)	30.09" Hg

* Indoor air readings shall be taken from library/cubicle room (i.e., room SDS-1 is located in)

System Vapor Sampling

Sample Location	Sample Collected (Y/N)	Date/Time	Grab or Integrated Sample?	Canister Vacuum (inHg)	
				Start	Finish
SDS-1	Y	9/1/2017 @ 0850	Grab	-27	-5
SDS-2	Y	9/1/2017 @ 0857	Grab	-30	-5
Effluent	Y	9/1/2017 @ 0900	Grab	-28	-5.5

24-Hour Continuous Sub-Slab Differential Pressure Monitoring

Vacuum Monitoring Point	Conducted (Y/N)	Notes
VMP-1	N	
VMP-2	N	
VMP-3	N	
VMP-4	N	
VMP-5	N	
VMP-6	N	
VMP-7	N	
VMP-8	N	
VMP-9	N	
VMP-10	N	

General Electric Company, Pittsfield, Massachusetts
Building 59 Sub-Slab Depressurization System
Quarterly OM&M Checklist

Date: 6/29/2017
Time: 1400
Technician: D. Zuck

Task	Frequency	Conducted (Y/N)	Notes
Complete System Monitoring Log	Quarterly	Y	
Complete Performance Monitoring Log	Quarterly	Y	
Complete Alarm Response Log	As Needed	N	
Conduct Instantaneous Sub-Slab Differential Pressure Monitoring	See Table 4	Y	
Conduct 24-Hour Continuous Differential Pressure Monitoring	See Table 4	N	
Conduct System Vapor sampling	See Table 5	Y	
Blower Inspection	Annual	N	
Blower Hand-Off-Auto Switch Test	Annual	N	
Knockout Tank Liquid Level Check and/or Draining ⁽¹⁾	Quarterly	Y	No liquid
Condensation Check ⁽¹⁾	Quarterly	Y	No liquid
In-Line Air Filter Element Inspection and/or Replacement ⁽²⁾⁽³⁾	Annual	N	
Dilution Line Air Filter Element Inspection and/or Replacement	Annual	N	
Extraction Point Riser Inspection	Quarterly	Y	good
Discharge Stack Inspection	Quarterly	Y	good
Knockout Tank Liquid Level Check and/or Draining ⁽⁴⁾⁽⁵⁾	Annual	N	
High Pressure Switch Test ⁽⁴⁾⁽⁶⁾	Annual	N	
Vacuum Transmitter Test ⁽⁴⁾⁽⁷⁾	Annual	N	
Vacuum Relief Valve Test (should open at 75 in w.c. vacuum)	Annual	N	
Alarm Notification Test ⁽⁴⁾	Annual	N	
Blower Voltage and Current Check ⁽³⁾	As Needed	N	

Notes:

- 1) Condensation shall be containerized and disposed of in coordination with GE's onsite waste managing contractor.
- 2) System shall be shutdown prior to performing. System shutdown shall be coordinated in advance with GE personnel.
- 3) Lockout/tagout and work on energized equipment shall be conducted in accordance with GE's Contractor Safety Program.
- 4) Will cause system shutdown. GE personnel shall be notified in advance.
- 5) Knockout tank shall be filled with water using lower drain port.
- 6) Pressure switch should change state when line pressure exceeds 15 iwc. Squeeze bulb air pump may be used to simulate pressure.

General Electric Company, Pittsfield, Massachusetts
Building 59 Sub-Slab Depressurization System
System Monitoring Log

Date: 6/29/2017
Time: 1400
Technician: D. Zuck

SYSTEM STATUS

	YES	NO	Notes
Is blower running?	☒	☐	
Is "PUMP RUNNING" light lit?	☒	☐	
Is HAND-OFF-AUTO switch in "AUTO" position?	☒	☐	
Is "HIGH FLUID LEVEL" alarm light lit?	☐	☒	replaced bulb
Is "HIGH PRESSURE" alarm light lit?	☐	☒	
Is "LOW VACUUM" alarm light lit?	☐	☒	
Is disconnect handle on control panel in "ON" position?	☒	☐	
Is control panel door securely closed?	☒	☐	

SYSTEM PARAMETERS

Blower Runtime (hours)	12,121.00
Influent Vapor Extraction Flow Rate (cfm) (<i>gauge FI-101</i>)	~50
Knockout Tank Vacuum (in w.c.) (<i>from digital display</i>)	59
Knockout Tank Vacuum (in w.c.) (<i>gauge VI-101</i>)	-60
Knockout Tank Liquid Level (inches above top of skid)	0 - Dry
Post-filter/Pre-dilution Vacuum (in w.c.) (<i>gauge VI-102</i>)	-56
Post-dilution/Pre-blower Vacuum (<i>gauge VI-103</i>)	-74
Post-blower Pressure (in w.c.) (<i>gauge PI-201</i>)	0
Post-blower temperature (°F) (<i>gauge TI-201</i>)	138
Extraction Point SDS-1 Vacuum (in w.c.) (<i>VI-001</i>)	-57
Extraction Point SDS-2 Vacuum (in w.c.) (<i>VI-002</i>)	-55
Is dilution valve V-102 closed 100% (Y/N)	NO ~1/3 open
Is extraction point SDS-1 in-line valve V-001 opened 100% (Y/N)	Yes
Is extraction point SDS-2 in-line valve V-002 opened 100% (Y/N)	Yes

GENERAL

Are there any unusual noises, vibrations or odors detected at the system? No

Inspect all fittings, piping, relief valves and sample ports for leaks. Note any observations: OK

Was fence enclosure secure upon arrival? (Y/N) Yes

Other notes: _____

General Electric Company, Pittsfield, Massachusetts
Building 59 Sub-Slab Depressurization System
Performance Monitoring Log

Date: 6/29/2017
Time: 1400
Technician: D. Zuck

System Status

	YES	NO	Notes
Is blower running?	☒	☐	
Was monthly OM&M Log Sheet completed?	☒	☐	
Was instantaneous sub-slab differential pressure monitoring conducted?	☒	☐	
Was air sampling conducted?	☒	☐	
Was 24-hour continuous differential pressure monitoring conducted?	☐	☒	Annual (4th Quarter 2017)

Instantaneous Sub-Slab Differential Pressure Monitoring

Vacuum Monitoring Point	Differential Pressure (in w.c.) [use negative sign to indicate vacuum]
VMP-1	-0.228
VMP-2	-0.226
VMP-3	-0.411
VMP-4	-0.007
VMP-5	-0.017
VMP-6	-0.045
VMP-7	-0.674
VMP-8	-0.046
VMP-9	-0.076
VMP-10	-0.027

Indicate the following conditions:

Indoor air temperature (°F)*	72
Indoor air pressure (in Hg)*	NA
Outdoor air temperature (°F)	73
Atmospheric pressure (in Hg)	30.00" Hg

* Indoor air readings shall be taken from library/cubicle room (i.e., room SDS-1 is located in)

System Vapor Sampling

Sample Location	Sample Collected (Y/N)	Date/Time	Grab or Integrated Sample?	Canister Vacuum (inHg)	
				Start	Finish
Effluent	Y	6/29/2017 @ 1434	Grab	-30	-6.5
SDS-1	Y	6/29/2017 @ 1456	Grab	-30	-5.5
SDS-2	Y	6/29/2017 @ 1505	Grab	-30	-6.5

24-Hour Continuous Sub-Slab Differential Pressure Monitoring

Vacuum Monitoring Point	Conducted (Y/N)	Notes
VMP-1	N	
VMP-2	N	
VMP-3	N	
VMP-4	N	
VMP-5	N	
VMP-6	N	
VMP-7	N	
VMP-8	N	
VMP-9	N	
VMP-10	N	

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