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June 23, 2011

BY FEDERAL EXPRESS OVERNIGHT

JUN 27 2011

Mr. John Miller
Environmental Engineer
Division of Environmental Remediation
New York State Department of Environmental Conservation
625 Broadway, 11th Floor
Albany, New York 12233-7017

Subject: **2010 Indoor Air and Soil Gas Investigation Report**
Pemart Avenue former MGP Site (NYSDEC Site No. V00566)
Peekskill, New York
Voluntary Clean-up Agreement – Index No. D2-0003-02-08

Dear Mr. Miller:

Enclosed for the Department's review and approval are two hard copies and one electronic copy on CD of the 2010 Indoor Air and Soil Gas Investigation Report for the Pemart Avenue Works former MGP.

Please contact me directly should you have any questions regarding this submittal.

Very truly yours,

Neil J. O'Halloran

Neil O'Halloran
Project Manager,
MGP Remediation Group
Environment, Health and Safety Department

Enc.

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Project Files

AECOM Environment

Prepared for:
Consolidated Edison

Prepared by:
AECOM
Westford, MA
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June 2011

2010 Indoor Air and Soil Gas Investigation

Pemart Former Manufactured Gas Plant Site Peekskill, New York

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2010 Indoor Air and Soil Gas Investigation

Pemart Former Manufactured Gas Plant Site
Peekskill, New York

Prepared By Mark McCabe

Reviewed By Doug Simmons

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1.0 Introduction

This report presents a summary of field observations and analytical results from the Indoor Air and Soil Gas Investigation conducted on March 18, 2010 at the Pemart Avenue Former Manufactured Gas Plant (MGP) Site. The performance of the sampling program was requested by the New York State Department of Conservation (NYSDEC) as part of the ongoing investigation of the site.

1.1 Project Background

Results of the Remedial Investigation (RI) of the site showed that subsurface soil and groundwater are impacted by several sources, including MGP-related residuals (e.g., coal tar), petroleum releases, and solvents. Impacts from one or more of these source materials were detected in the areas adjacent to the buildings at the following addresses:

- 190 North Water Street – the former gas works building: The northern two-thirds of the building is currently used by a custom wood-working shop; the remaining area formerly housed a commercial laboratory that specialized in the analysis of asbestos-containing materials, but was unoccupied during the 2010 sampling.
- 400 Main Street – an off-site building located adjacent to the former gas holders (i.e., the east side of North Water Street): The ground floor of the building is used as a thrift shop and the second floor is used for residential and commercial purposes.
- 200 North Water Street – located in the area of a former electrical generating plant: The first floor is used as a warehouse and parking garage, while the second floor serves as a homeless shelter (Jan Peek Homeless Shelter).

The locations of these buildings are illustrated on Figure 1.

In response to the RI findings, AECOM, on behalf of Con Edison, prepared and submitted a Work Plan (ENSR, 2008) associated with soil gas sampling and sub slab/indoor air sampling at the buildings most likely to be effected by subsurface residuals from the MGP site: 190 North Water Street and 400 Main Street. The sampling was completed on June 26, 2008 and the data was provided to NYSDEC in a report dated March 3, 2009 (AECOM, 2009). The results from the sampling demonstrated that the levels of constituents in indoor air were generally consistent with established background values, and were likely attributable to cleaning products that were stored in the buildings. A survey and inventory of products/materials used and/or stored in each of the buildings was completed prior to sampling. The results of the surveys/inventories were documented on New York State Department of Health (NYSDOH) Indoor Air Quality Questionnaire and Building Inventory Forms. The potential for vapor intrusion risk was determined to be low.

1.2 Project Objectives

Based on the results of the June 2008 sampling, NYSDEC requested a second round of sampling in a letter dated October 16, 2009. The objectives for the second sampling round included the following:

- Evaluate the potential for vapor intrusion under "worst-case" conditions, i.e., during the heating season, in the two buildings that had been sampled previously; and

- Evaluate indoor air quality at 200 North Water Street, a structure in residential use and not sampled previously.

The second round of sampling was conducted on March 18, 2010 in accordance with the procedures approved in the 2008 Work Plan. The remainder of this report is organized in the following manner: a summary of the results and conclusions from the previous sampling program are provided for reference in Section 2; the scope of work for the 2010 sampling activities is detailed in Section 3; and the results from the program are presented in Section 4, with conclusions and recommendations provided in Section 5, and references in Section 6. Data summaries from the 2008 program, NYSDOH Indoor Air Quality Questionnaire and Building Inventory Forms, field data sheets, meteorological data, and the Data Usability Summary Report (DUSR) from the current effort are provided in the appendices to this document.

2.0 Previous Investigation

The Work Plan for the 2008 sampling was developed in accordance with guidance provided by the NYSDOH for evaluating soil vapor intrusion (NYSDOH, 2006) and approved by NYSDEC in a letter dated June 16, 2008. The scope of work outlined in the Work Plan was developed to address the following objectives:

- Evaluate the nature and extent of volatile organic compounds (VOCs) in soil gas related to subsurface soil and groundwater impacts that were identified during the RI;
- Determine if the VOCs associated with soil and groundwater impacts are present in soil gas beneath the concrete building foundation slabs; and
- Evaluate the potential for the VOCs detected in the sub slab areas to migrate into and adversely influence indoor air quality in the associated buildings.

The field work was conducted on June 26, 2008. A figure illustrating the sampling locations and summary table of results are provided in Appendix A. The results from the program are summarized below.

2.1 Soil Gas

The results from the soil gas samples from areas not associated with the individual site buildings indicated the presence of over 20 VOCs including: aromatic hydrocarbons (MGP, petroleum, solvents); alkanes (primarily petroleum); and chlorinated hydrocarbons (solvents). The results from sub slab results are summarized below. Locations at 190 North Water Street and 400 Main Street were prioritized for evaluation since they were believed to have the greatest potential to exhibit impacts from MGP residuals. Separate evaluations were conducted for the 190 North Water Street structure to address the specific uses of the property. Note that the following summaries focus on the principal constituents of interest for the program, i.e., those providing the greatest potential to exceed NYSDOH background values in indoor air. For the purpose of this summary, constituents with concentrations greater than or equal to 10 $\mu g/m^3$ have been identified as principal constituents.

Sub Slab - 190 North Water Street (north)

Sixteen VOCs were detected in the sub slab sample. Principal constituents included:

- Constituents potentially related to MGP residuals
  - xylenes - 2,000 $\mu g/m^3$
  - toluene - 1,300 $\mu g/m^3$
  - ethylbenzene - 510 $\mu g/m^3$
  - carbon disulfide – 110 $\mu g/m^3$
  - benzene - 47 $\mu g/m^3$
  - heptane - 28 $\mu g/m^3$
  - hexane - 20 $\mu g/m^3$.

- Non-MGP constituents
  - acetone - 1,500 µg/m^3
  - chloroform - 430 µg/m^3
  - 1,1,1-trichloroethane - 180 µg/m^3
  - bromodichloromethane - 46 µg/m^3
  - tetrachloroethene - 31 µg/m^3
  - 2 propanol - 13 µg/m^3.

Sub Slab - 190 North Water Street (south)

Six VOCs were detected in the sub slab sample. Principal constituents included:

- Constituents potentially related to MGP residuals:
  - toluene - 42 µg/m^3
- Non-MGP constituents
  - trichloroethene - 5,800 µg/m^3
  - tetrachloroethene - 110 µg/m^3
  - 1,1,1-trichloroethane - 89 µg/m^3
  - chloroform - 67 µg/m^3
  - 2-propanol - 42 µg/m^3

Sub-Slab - 400 Main Street

A total of 33 VOCs were detected in the sub slab sample. Principal constituents included:

- Constituents potentially related to MGP residuals:
  - xylenes - 110 µg/m^3
  - toluene - 75 µg/m^3
  - ethylbenzene - 21 µg/m^3
  - hexane - 10 µg/m^3
- Non-MGP constituents:
  - chloroform - 640 µg/m^3
  - ethanol - 350 µg/m^3
  - 1,1,1-trichloroethane - 320 µg/m^3
  - acetone - 79 µg/m^3
  - bromodichloromethane - 51 µg/m^3
  - 2-propanol - 36 µg/m^3
  - 1,3 dichlorobenzene - 16 µg/m^3

- 2-butanone - 12 µg/m^3

2.2 Indoor Air

Indoor samples were collected concurrently with the sub slab samples at each of the buildings. The following summaries again focus on the principal constituents for the study. In this case, the summaries present those constituents that either have concentrations that exceed the background levels established by NYSDOH, or are consistent with the upper range (within the 75th and 90th percentiles) of that database. The results from these activities are summarized below.

190 North Street (north) – This area of the building was occupied by a custom woodworking business at the time samples were collected.

- Two VOCs were detected at levels greater than the NYSDOH background values:
  - acetone - 19,000 µg/m^3
  - chloroform - 120 µg/m^3
- Toluene was detected within the upper range of the NYSDOH database.

The concentration of acetone is an order of magnitude greater than the associated soil gas value and thought to result from an interior source. Levels of the other constituent known to be present in both indoor air and soil gas (chloroform) are present at consistent levels in both media. Acetone and chloroform are common elements of the cleaning products identified within the workspace.

190 North Water Street (south) – This area of the building was occupied by an asbestos analytical laboratory at the time samples were collected.

The following constituents exceeded the background levels established by NYSDOH.

- Constituents potentially related to MGP residuals:
  - toluene - 72 µg/m^3
  - m,p-xylenes - 42 µg/m^3
  - o-xylene - 13 µg/m^3
  - 1,2,4-trimethylbenzene - 11 µg/m^3
  - ethylbenzene - 9.8 µg/m^3
  - 1,2,3-trimethylbenzene - 3.1 µg/m^3
- Non-MGP constituents:
  - acetone - 1,300 µg/m^3
  - 2-butanone - 17 µg/m^3
  - chloroform - 13 µg/m^3
- Five additional constituents were detected at concentrations within the upper range of the NYSDOH background values. They included: 1,3,5-trimethylbenzene, benzene, heptane, hexane, and 2,2,4-trimethylpentane. None of these VOCs were detected in the corresponding sub slab soil gas sample.

Indoor air impacts did not appear to be related to vapor intrusion. There was no consistent pattern in the number or types of constituents when reviewed with respect to the soil gas results, and constituent levels were generally greater in indoor air. The associated inventory of interior spaces identified the presence of products that could be potential sources of VOCs, including: paint, furniture polish, air freshener aerosol spray, disinfectant aerosol spray, and ice melt pellets.

Additionally, the building is located at the intersection with North Water Street, which receives significant traffic by commercial trucks (e.g., delivery, construction, landscaping trucks, etc.) and passenger vehicles, including numerous taxis. The analytical results of the upwind and downwind ambient air samples were generally similar and contained detectable levels of 14 of the 19 constituents identified in indoor air samples.

2.2.1 400 Main Street

No constituents exceeded the range of background levels established by NYSDOH. Two constituents (m/p-xylenes and 1,1,1-trichloroethane) were detected at concentrations within the upper range of the background database:.

The following conclusions were developed from a review of the results from the 2008 program.

- Soil gas across much of the Site contains numerous VOCs that originated from multiple source materials including MGP residuals (coal tar), petroleum products (e.g., gasoline and fuel oil), and solvents (e.g., acetone and trichloroethene).
- Based on the concentrations of VOCs detected in indoor air and the condition of the concrete floor slabs at grade, the potential for VOCs to migrate into the buildings and adversely affect indoor air quality is low or non-existent.
- The overall indoor air quality in the various buildings was attributed to the use and/or storage of products and/or materials as part of the routine commercial operations and/or influence from ambient (outside) air.

3.0 Investigation Scope of Work

The air and soil gas samples for the 2010 investigation were collected and analyzed in accordance with the methods and procedures outlined in the Work Plan. The specific sampling locations are shown on Figure 2, and copies of field sampling forms are provided in Appendix B. A description of each component of the sampling and analytical program is provided below.

3.1 Soil Gas Sampling

Sampling locations were consistent with those used during the previous program with the following exception: a sample was collected from a crawl space associated with 200 North Main Street. The crawl space is accessed from a slotted man hole in the floor of the warehouse/garage area, and is open to ambient air through vents in the side of the building. Activities associated with the installation of sub slab sampling points and collection of soil gas samples are described below.

3.1.1 Utility Clearance

Prior to selecting specific sampling locations for the soil gas samples for the 2008 sampling event, which were resampled during the 2010 sampling event, a survey was conducted to identify and locate sub-slab utilities (e.g., electrical lines, water pipes, gas lines, sewer lines, etc.) in the areas of proposed sampling. The underground utility clearance process included a Code 753 mark out, review of available as-built utility maps and drawings, and the review of utility mark-outs previously conducted during the RI. The specific sampling locations were selected so as to avoid encountering and potentially damaging any subsurface utilities during installation of the soil gas sampling points.

3.1.2 Sub Slab Sampling Point Installation

Prior to installing the soil gas sampling points, an electric hammer drill was used to create a small (½-inch) diameter hole. The drill was advanced to a depth of approximately three inches below the bottom of the concrete foundation slab. An expendable stainless steel mesh soil gas sampling point attached to Teflon™ sampling tubing was installed in the drilled hole so that a portion of the sample tube extended approximately two feet above the top of the concrete slab. The annulus (space between the drill hole and the sampling tubing) was sealed using hydrated granular bentonite to isolate the soil gas from ambient air.

3.1.3 Collection of Soil Gas Samples

After installation of the sampling point, a photoionization detector (PID) was attached to the Teflon™ sampling tube to perform an initial screening of the soil gas for total VOCs (TVOCs). As described in the Work Plan, a total of five sample tube volumes were then purged using the PID. Following purging, the PID was re-attached to the Teflon™ sample tube to perform a final post-purge screening of the soil gas. Note that the purging process was not required for the sample collected within the crawl space at 200 North Main Street.

Subsequent to purging the sample tube, a 6-liter Summa canister (pre-cleaned and evacuated), equipped with a calibrated flow regulator was connected to the sample tubing. The valves of all flow regulators were then opened within a period of approximately 15 minutes to initiate collection of soil gas.and the initial canister pressures indicated on the flow regulator gauges were recorded. The Summa canister pressures shown on the flow regulator pressure gauges were periodically monitored

to verify that there were no leaks. Samples were collected over a two-hour period. Prior to closing the valves and terminating the sample collection, the final canister pressures were recorded.

Columbia Analytical Services (CAS) in Simi Valley, California prepared the Summa canisters, provided calibrated flow meters, and performed the soil gas analyses. The samples were analyzed for VOCs using the United States Environmental Protection Agency (USEPA) Method TO-15 modified to included additional analytes that are considered to be indicative of a coal tar source, e.g., naphthalene, indane, indene, and thiophene.

3.2 Indoor Air Sampling

Sampling locations were consistent with those used during the 2008 program with the following exceptions:

- 400 North Water Street – SSV03 was moved a short distance due to the presence of wall-to-wall carpet and clothing racks that had been installed since the 2008 sampling round.
- 200 North Water Street – samples were collected from the following locations that had not been sampled previously: first floor warehouse/garage area and second floor residential area. Note that an additional quality control sample was collected in the residential area of the building.

Each Summa canister was placed so that the inlet port of the attached flow regulator was at chair height, or approximately three feet above the floor, to mimic the breathing zone of a child. Prior to sample collection, the indoor air in the vicinity of each sample location was screened for TVOCs using a PID. The valves of all flow regulators were then opened within a period of approximately 15 minutes to initiate collection of soil gas and the initial canister pressures indicated on the flow regulator gauges were recorded. The Summa canister pressures shown on the flow regulator pressure gauges were periodically monitored to verify that there were no leaks. Samples were collected over a two-hour period. Prior to closing the valves and terminating the sample collection, the final canister pressures were recorded. As in the case of the soil gas samples, analysis was conducted by CAS.

A survey and inventory of products/materials used and/or stored in each of the buildings was completed prior to sampling. The results of the surveys/inventories were documented on NYSDOH Indoor Air Quality Questionnaire and Building Inventory Forms. The completed forms are provided in Appendix C. Note that samples of ambient air, intended to provide additional information on site-specific background conditions, were not collected due to an oversight.

3.3 Meteorological Measurements

Reports of meteorological data for the area were obtained for the date of sampling in the event that the information was needed to support the evaluation of the indoor air results. This quality controlled local climatological data was obtained electronically at www.weatherunderground.com (from a meteorological station at Stewart International Airport in Newburgh, New York which is located approximately 24 miles northwest of the Site). Hourly measurements of visibility, dew point, relative humidity, wind speed and direction, and barometric pressure were reported and are summarized in Appendix D.

4.0 Presentation and Discussion of Results

The findings of this sampling and analytical program, including field measurements, product inventories and analytical data, were reviewed in order to evaluate the potential for soil vapor intrusion. All analytical data presented herein were validated using USEPA Region 2 data validation Standard Operating Procedures (SOPs) as guidance. The validation process as it was applied to the analytical data for samples collected as part of the soil vapor intrusion investigation described herein is documented in the DUSR that was prepared in accordance with the NYSDEC Guidance for Development of Data Usability Summary Reports (NYSDEC, 2001). Where necessary, the USEPA Region 2 SOPs were modified to incorporate project-specific or method-specific criteria. Data qualifiers were applied consistent with the Region 2 Guidance. The DUSR for the March 18, 2010 sampling is provided as Appendix E. The data are valid as reported and may be used for the purpose of assessing the potential for soil vapor intrusion. No data qualifications were required for the 2010 data. The sampling and analytical data are discussed below.

4.1 Soil Gas

Soil gas samples were collected from sub slab locations at 190 North Water Street and 400 Main Street, as well as a crawl space location at 200 North Main Street. The results from field screening and constituent-specific sampling activities are provided in Tables 1 and 2, respectively and discussed below. As discussed previously (Section 2), the summaries focus on the principal constituents of interest for the program, i.e., those with concentrations greater than 10 $\mu g/m^3$ since they are thought, given the anticipated attenuation provided by soil and building foundations, to provide the greatest potential to be associated with significant levels in indoor air.

4.1.1 190 North Water Street (north)

The initial field screening of soil gas at the location (SSV01) indicated levels of TVOCs that ranged, between 2.4 and 4.1 ppm. The results from the constituent-specific analysis of the sample indicated that the following constituents were detected:

- trichloroethene - 4,400 $\mu g/m^3$
- tetrachloroethene - 68 $\mu g/m^3$
- 1,1,1-trichloroethane - 50 $\mu g/m^3$
- cis-1,2-dichloroethene - 27 $\mu g/m^3$

All of these chlorinated constituents are associated with cleaning solvents. A comparison of these results to the 2008 data indicates that in the 2010 samples there were fewer VOCs detected (i.e., 4 in 2010 versus 16 in 2008). No reason for this observation between the two sampling events is apparent. It is noted that the detection levels for the 2010 sample for this location were elevated. In efforts to determine if other VOCs were potentially present below the high reported detection levels and thus not reported, the chromatograms were reviewed by the laboratory. Based on the chromatogram reviews, no other VOCs were identified.

4.1.2 190 North Water Street (south)

The field screening of soil gas at SSV02 indicated TVOC levels ranging from 0.1 and 1.9 ppm. The results from the constituent-specific analysis of the sample indicated that 21 VOCs were present at detectable levels. The results for the principal constituents of interest are summarized below.

- Constituent potentially related to MGP residuals:
  - benzene - 11 $\mu g/m^3$
  - isopentane - 10 $\mu g/m^3$
- Non-MGP constituents:
  - 1,1,1-trichloroethane - 50 $\mu g/m^3$
  - ethanol - 38 $\mu g/m^3$
  - tetrachloroethene - 14 $\mu g/m^3$

A comparison of the data with the 2008 results indicates an increased number of constituents detected, likely due to improved analytical sensitivity. However, the results suggest a trend towards lower concentrations in 2010, e.g. trichloroethene 1 $\mu g/m^3$ versus 5,800 $\mu g/m^3$ in 2008.

4.1.3 400 Main Street

Field screening results of soil gas at location SSV03 ranged from 2.1 to 2.8 ppm of TVOCs. The results from the constituent-specific analysis of the sample indicated that 16 VOCs were detected. The levels of potential MGP constituents, including aromatic compounds (toluene, m/p xylene, benzene) and alkanes (hexane, heptane, 2-methylpentane, 2,2,4-trimethylpentane, isopentane) were all less than 10 $\mu g/m^3$.

Principal non-MGP constituents were limited to the following:

- tetrachloroethene - 130 $\mu g/m^3$
- ethanol - 36 $\mu g/m^3$
- acetone - 19 $\mu g/m^3$

A comparison to the 2008 results indicates that there are currently fewer constituents at detectable levels (16 versus 30 in 2008), and that there are generally lower concentrations for those constituents that were detected in both events.

4.1.4 200 North Water Street

The screening results from the crawl space (CS-1) were less than 1 ppm of TVOCs. A total of 14 VOCs were detected in the samples. Note that, as opposed to the discussions of sub slab data, the concentrations for all constituents are presented below since the crawl space "vents" directly to the adjacent warehouse/garage space.

- Constituents potentially related to MGP residuals included:
  - isopentane - 8.3 $\mu g/m^3$
  - toluene - 3.6 $\mu g/m^3$

  - hexane - 3.4 µg/m^3
  - 2-methylpentane - 2.8 µg/m^3
  - benzene - 1.7 µg/m^3
  - cyclohexane - 1.5 µg/m^3
  - 2,2,4-trimethylpentane - 1.2 µg/m^3
  - heptane - 0.845 µg/m^3
- Non MGP constituents included:
  - ethanol - 28 µg/m^3
  - cis-1,2-dichloroethene - 7.2 µg/m^3
  - trichloroethene – 3.0 µg/m^3
  - dichlorodifluoromethane (Freon 12) - 2.3 µg/m^3
  - propene - 1.2 µg/m^3
  - trichlorofluoromethane (Freon 11) – 1.1 µg/m^3

The source of VOCs in the crawl space is unclear. Although sub slab results are not available for this area, the types and levels of constituents are similar to those observed in soil gas samples collected near the outside the NW corner of 190 Water Street (SV03) in 2008. Similarly, the constituent levels are generally consistent with the background values for indoor air established by NYSDOH.

4.2 Indoor Air

Indoor air samples were collected concurrently with the soil gas samples. The meteorological conditions during the sampling were generally representative of the season. The temperatures fluctuated between 24.8 and 35.6 degrees Fahrenheit and the barometric pressure was stable (between 29.87 and 29.77 inches mercury [Hg]). Wind speed during the sampling period ranged from 9.2 to 11.5 mph. The results from the samples are summarized below.

4.2.1 190 North Street (north) – Woodworking Shop

Eleven VOCs were detected at location IA-01; none exceeded the range of NYSDOH background levels.

- Potentially MGP – related constituents included:
  - isopentane - 4.1 µg/m^3
  - toluene - 2.3 µg/m^3
  - hexane - 1.7 µg/m^3
  - naphthalene -1.6 µg/m^3
  - 2-methylpentane - 1.4 µg/m^3
  - 1,2,4-trimethylbenzene - 0.97 µg/m^3
  - benzene - 0.88 µg/m^3

- Non-MGP constituents included:
  - ethanol - 40 µg/m^3
  - acetone - 11 µg/m^3
  - dichlorodifluoromethane (Freon 12) - 2.6 µg/m^3
  - trichlorofluoromethane (Freon 11) - 1 .2 µg/m^3

A review of the results with respect to the previous data indicates that a greater number of constituents were detected in the recent program (11 versus 3 in 2008) due to increased sensitivity in the analysis. For those constituents that were detected in both programs (acetone, chloroform, and ethanol), the concentrations were observed to be significantly lower in 2010.

There is no evidence of vapor intrusion. None of the VOCs detected at elevated levels in soil gas were present in the corresponding indoor air sample and the building inspection showed that the concrete foundation slab is 4 to 7-inches thick with no significant cracks or breaches. Further, the pre-sampling inventory noted the storage of materials consistent with woodworking, including wood stain, paint, mineral spirits, glues, and contact cement, as well as a motorcycle (with a gasoline-filled fuel tank), and engine motor oil. These stored materials contained 1,2,4-trimethylbenzene, benzene, hexane, toluene, xylenes, acetone, and/or other VOCs. It is also noted that the building is heated by a fuel-oil fired boiler, which is located in the northwest corner of the northern portion of the building at 190 North Water Street.

4.2.2 190 North Street (south) – Currently Unoccupied

The screening results from the sampling location in the lower level of the former lab space ranged from 0.1 to 1.9 ppm of TVOCs. A total of 17 VOCs were detected in the indoor air sample. None exceeded the range of NYSDOH background levels and only one constituent, chloroform (1.4 µg/m^3), was present at a level within the upper range of the established background values. Other constituents included:

- Potentially MGP – related constituents included:
  - isopentane - 6.7 µg/m^3
  - toluene - 6.2 µg/m^3
  - xylenes - 3.2 µg/m^3
  - hexane - 2.2 µg/m^3
  - 2-methylpentane - 2.1 µg/m^3
  - benzene - 1.6 µg/m^3
  - 1,2,4-trimethylbenzene - 1.4 µg/m^3
  - heptane - 1.2 µg/m^3
  - 2,2,4-trimethylpentane - 1.2 µg/m^3
  - naphthalene - 1.1 µg/m^3
- Non-MGP constituents included:
  - ethanol - 140 µg/m^3

- acetone - 21 µg/m^3
- 2-propanol- 3.0 µg/m^3
- dichlorodifluoromethane (Freon 12) - 2.3 µg/m^3
- trichlorofluoromethane (Freon 11) - 1.7 µg/m^3
- propene – 1.6 µg/m^3

As with the north location in the building, the results do not suggest that vapor intrusion is occurring. The nature and concentrations of constituents are similar to those observed in the north end of the building, supporting the effect of interior sources of impacts. During the pre-sampling inventory, paint, furniture polish, air freshener aerosol spray, disinfectant aerosol spray, and ice melt pellets were observed in the building. According to their labels, these products and materials contained 1,2,4-trimethylbenzene, ethylbenzene, toluene, xylenes, 2-butanone (MEK), acetone, ethanol, other VOCs, and petroleum distillates.

4.2.3 400 Main Street

The constituent-specific results for location IA-03 indicate that 10 VOCs were detected. However, none exceeded the range of NYSDOH background levels. They included:

- Potentially MGP – related constituents included:
  - isopentane – 5.2 µg/m^3
  - toluene –1.8 µg/m^3
  - hexane – 1.8 µg/m^3
  - 2-methylpentane – 1.6 µg/m^3
  - benzene- 0.93 µg/m^3
  - 2,2,4-trimethylpentane - 0.89 µg/m^3
- Non-MGP constituents included:
  - ethanol - 27 µg/m^3
  - acetone - 12 µg/m^3
  - dichlorodifluoromethane (Freon 12) - 2.3 µg/m^3
  - trichlorofluoromethane (Freon 11) - 1.2 µg/m^3

A review of the data indicates that the results are generally consistent with those obtained in 2008 and do not suggest the occurrence of vapor intrusion. The foundation slab (8-inch thick) did not contain significant cracks or breaches and the constituents detected were consistent with the products observed during the pre-sampling inventory, including carpet detergent, car cleaning products, fire extinguishers; containing hydrocarbons, and other VOC-containing products. It is also noted that the building is located at the intersection with North Water Street, which receives significant traffic by commercial trucks (e.g., delivery, construction, landscaping trucks, etc.) and passenger vehicles, including numerous taxis.

4.2.4 200 North Water Street

Indoor air samples were collected from the following areas of the building:

- First Floor Area (1 sample) - warehouse, parking garage
- Second Floor Area (3 samples including a duplicate) - homeless shelter

Field screening results in all locations indicated that there were no detectable levels of TVOC in the building.

4.2.5 First Floor Area – Parking Garage and Warehouse

The constituent-specific results from location IA-05 indicate that a total of 16 VOCs were detected in the warehouse and parking garage area of the building. Only two constituents, cis-1,2-trichloroethene (1.4 $\mu g/m^3$) and trichloroethene (1 $\mu g/m^3$) exceeded the range of NYSDOH background values. A third constituent, cyclohexane (6.2 $\mu g/m^3$) was determined to be within the upper range of background values. The remaining constituents included the following.

- Constituents potentially related to MGP residuals included:
  - isopentane - 7.5 $\mu g/m^3$
  - toluene - 6.3 $\mu g/m^3$
  - hexane - 2.1 $\mu g/m^3$
  - 2-methylpentane - 2.1 $\mu g/m^3$
  - benzene - 1.5 $\mu g/m^3$
  - heptanes - 1.4 $\mu g/m^3$
  - 2,2,4-trimethyl pentane - 1.0 $\mu g/m^3$
- Non MGP constituents included:
  - ethanol - 43 $\mu g/m^3$
  - acetone - 18 $\mu g/m^3$
  - dichlorodifluoromethane (Freon 12) - 2.4 $\mu g/m^3$
  - propene - 1.5 $\mu g/m^3$
  - trichlorofluoromethane (Freon 11) - 1.1 $\mu g/m^3$
  - trichloroethene - 1.0 $\mu g/m^3$

The constituents were similar in number/type to those detected in crawlspace. However, the constituents with elevated levels with regard to background (cis-1,2-trichloroethene, trichloroethene, and cyclohexane) were present at greater levels in the garage than in the crawlspace.

4.2.6 Second Floor Area – Residential Use

The results from the samples collected in the residential space (IA-06 and IA-07) indicated that 16 VOCs were detected. None exceeded the range of NYSDOH background values, and two

constituents, ethanol (1,300 µg/m^3) and cyclohexane (3 µg/m^3), were within the upper range of the NYSDOH background concentrations for indoor air. The remaining constituents included the following.

- Constituents potentially related to MGP residuals included:
  - isopentane - 21 µg/m^3
  - toluene - 7.1 µg/m^3
  - hexane - 3.9 µg/m^3
  - 2-methylpentane - 3.6 µg/m^3
  - xylenes - 2.3 µg/m^3
  - benzene - 2.2 µg/m^3
  - heptanes - 1.8 µg/m^3
  - 2,2,4-trimethylpentane - 1.7 µg/m^3
  - naphthalene - 1.1 µg/m^3
- Non MGP constituents included:
  - 2-propanol - 86 µg/m^3
  - acetone - 34 µg/m^3
  - propene - 21 µg/m^3
  - dichlorodifluoromethane (Freon 12) - 2.7 µg/m^3
  - trichlorofluoromethane (Freon 11) - 1.7 µg/m^3

Both cyclohexane and ethanol are constituents of one or more of the cleaning products noted in the pre-sampling inventory for the facility.

5.0 Conclusions and Recommendations

The following conclusions are based on the data and field observations and measurements. The following conclusions can be drawn from the results of the monitoring program:

- Soil Gas
  - The results are consistent with RI findings and indicate the presence of constituents that are attributable to MGP petroleum and solvent releases.
  - The composition and concentrations of VOCs in soil gas have not changed significantly between the 2008 and 2010 sampling events. This suggests that flux of VOCs to soil gas from impacted subsurface soil and groundwater is in a quasi-steady state.
  - The foundations of the buildings appear to be competent and structurally sound and are serving as effective barriers against vapor intrusion.
- Indoor Air
  - Constituent concentrations are largely consistent with indoor air background levels established by NYSDOH.
  - VOCs that were detected at concentrations that exceeded their respective NYSDOH background values are generally limited to those VOCs that are also constituents of materials and/or products that are used and/or stored inside the buildings, such as paints, varnishes, solvents and cleaning products.
  - The findings are consistent with the results from the 2008 study.

Program results demonstrate that indoor air levels are likely attributable to use/storage of cleaning product and are generally consistent with background conditions. There is no indication that any mitigation measures are warranted at this time.

6.0 References

AECOM, 2009. Indoor Air and Soil Gas Investigation, Pemart Avenue former MGP Site. March 2009.

ENSR, 2008. Air Sampling Workplan at Pemart Avenue Former MGP, Peekskill, New York. March 31, 2008.

NYSDEC, 2001. Guidance for the Development of Data Usability Summary Reports, New York State Department of Environmental Conservation Division of Environmental Remediation. August 2001.

NYSDOH, 2006. Guidance for Evaluating Soil Vapor Intrusion in the State of New York, New York State Department of Health Bureau of Environmental Exposure Investigation. October 2006.

Tables

Table 1
Soil Gas and Indoor Air Sample Summary
Air and Soil Gas Collected on March 18, 2010
Pemart Ave Former MGP, Peekskill, NY

Sample Number	Canister Number	Location	Depth of Sample Probe (inches below surface grade)	Date	Sample Duration			Canister Pressure (mmHg)		PID Screening Range (ppm)	
					Start	Stop	Hrs:Mins	Initial	Final	Pre	Post
SSV01	SC01071	Indoor - lower level - wood-working shop on floor behind table saw at the center of southern wall of room	9	3/18/2010	11:52	13:53	2:01	30	7	4.1	2.4
IA01	AC01351	Indoor - lower level - wood-working shop by the inside door	NA	3/18/2010	11:51	13:52	2:01	29	7	NA	NA
SSV02	SC00840	Indoor - lower level - NE corner of lab office space under side table	6.5	3/18/2010	11:46	13:47	2:01	28	6	1.9	0.1
IA02	AC01097	Indoor - lower level - center of lab office at table height behind couch	NA	3/18/2010	11:48	13:47	1:59	29	5.5	NA	NA
SSV03	SC00890	Indoor - lower level - western garage floor between 2 concrete slabs	10	3/18/2010	12:03	14:04	2:01	29.5	6	2.1	2.8
IA03	AC01569	Indoor - lower level - western garage on top of mini fridge on northern wall	NA	3/18/2010	11:59	13:59	2:00	28	4	NA	NA
IA05	AC01040	Indoor - 1st floor - shelter storage area on top of box	NA	3/18/2010	11:15	13:15	2:00	30	8	NA	NA
CS-1	SC00558	Indoor - 1st floor - crawl space beneath manhole, co-located with IA-05	through top of manole cover	3/18/2010	11:23	13:23	2:00	28.5	5	0.9	0
IA-06	AC00884	Indoor - 2nd floor - shelter female bedroom on street side of building on top of dresser	NA	3/18/2010	11:41	14:15	2:34	29	8	NA	NA
IA-07	AC00845	Indoor - 2nd floor - shelter male bedroom on dresser	NA	3/18/2010	11:36	13:38	2:02	30	8	NA	NA
IA-07 (Duplicate)	AC00919	Indoor - 2nd floor - shelter male bedroom on dresser	NA	3/18/2010	11:37	13:36	1:59	28.5	5	NA	NA

Notes:

Background PID screening conducted of indoor or ambient air at each soil gas sample location.

NA = Not Applicable

Table 2
Air and Soil Gas Samples- Summary of Analytical Data for Volatile Organic Compounds
March 18, 2010 - Pemart Ave. Works Former MGP, Peekskill, NY

Sample Location	CAS number	190 North Water Street				200 North Water Street					400 Main Street		NYSDOH Background Indoor Air Concentrations [a]	
Sample Type		Indoor Air	Sub Slab Soil Gas	Indoor Air	Sub Slab Soil Gas	Sub Slab/Man-hole Soil Gas	Indoor Air				Indoor Air	Sub Slab Soil Gas	75th Percentile	90th Percentile
Sample Name		IA-01	SSV-01	IA-02	SSV-02	CS-01	IA-05	IA-06	IA-07 (DUP)	IA-07	IA-03	SSV-03		
Sample Date		3/18/10	3/18/10	3/18/10	3/18/10	3/18/10	3/18/10	3/18/10	3/18/10	3/18/10	3/18/10	3/18/10		
Possibly MGP Related[1]														
1,2,3-Trimethylbenzene	526-73-8	0.75 U	25 U	0.71 U	0.71 U	0.73 U	0.74 U	0.84 U	0.80 U	0.78 U	0.69 U	0.73 U	1.1	2.7
1,2,4-Trimethylbenzene	95-63-6	0.97	25 U	1.4	1.6	0.73 U	0.74 U	0.84 U	0.80 U	0.78 U	0.69 U	0.73 U	4.3	9.5
1,3,5-Trimethylbenzene	108-67-8	0.75 U	25 U	0.71 U	0.71 U	0.73 U	0.74 U	0.84 U	0.80 U	0.78 U	0.69 U	0.73 U	1.7	3.6
1,2,3,4-Tetramethylbenzene[3]	488-23-3	0.75 U	25 U	0.71 U	0.71 U	0.73 U	0.74 U	0.84 U	0.80 U	0.78 U	0.69 U	0.73 U	NA	NA
1,2,3,5-Tetramethylbenzene[3]	527-53-7	0.75 U	25 U	0.71 U	0.71 U	0.73 U	0.74 U	0.84 U	0.80 U	0.78 U	0.69 U	0.73 U	NA	NA
1,2,4,5-Tetramethylbenzene[3]	95-93-2	0.75 U	25 U	0.71 U	0.71 U	0.73 U	0.74 U	0.84 U	0.80 U	0.78 U	0.69 U	0.73 U	NA	NA
2,3-Dimethylpentane[3]	565-59-3	0.75 U	25 U	0.71 U	0.71 U	0.73 U	0.74 U	0.84 U	0.80 U	0.78 U	0.69 U	0.73 U	2.2	7.5
2-Hexanone	591-78-6	0.75 U	25 U	0.71 U	0.71 U	0.73 U	0.74 U	0.84 U	0.80 U	0.78 U	0.69 U	0.73 U	NA	NA
2-Methylpentane[3]	107-83-5	1.4	25 U	2.1	3.9	2.8	2.1	3.6	2.1	2.0	1.6	2.7	NA	NA
4-Ethyltoluene	622-96-8	0.75 U	25 U	0.71 U	0.71 U	0.73 U	0.74 U	0.84 U	0.80 U	0.78 U	0.69 U	0.73 U	NA	NA
4-Methyl-2-pentanone	108-10-1	0.75 U	25 U	0.71 U	0.71 U	0.73 U	0.74 U	0.84 U	0.80 U	0.78 U	0.69 U	0.73 U	0.86	2.2
Benzene	71-43-2	0.88	25 U	1.6	11	1.7	1.5	2.2	1.2	1.2	0.93	2.1	5.9	13
Carbon disulfide	75-15-0	7.5 U	250 U	7.1 U	7.1 U	7.3 U	7.4 U	8.4 U	8.0 U	7.8 U	6.9 U	7.3 U	NA	NA
Cyclohexane	110-82-7	1.5 U	50 U	1.4 U	1.4 U	1.5	6.2	7	1.6 U	1.6 U	1.4 U	1.5 U	2.6	8.1
Ethylbenzene	100-41-4	0.75 U	25 U	0.71 U	0.80	0.73 U	0.74 U	0.84 U	0.80 U	0.78 U	0.69 U	0.73 U	2.9	7.3
Heptane	142-82-5	0.75 U	25 U	1.2	1.2	0.84	1.4	1.8	0.80 U	0.78 U	0.69 U	0.90	7.6	19
Hexane	110-54-3	1.7	25 U	2.2	4.3	3.4	2.1	3.9	2.4	2.1	1.8	3.2	8	18
2,2,4-Trimethylpentane	540-84-1	0.75 U	25 U	1.2	1.3	1.2	1.0	1.7	1.1	0.83	0.89	0.56	2.1	6.5
Indene[3]	95-13-6	0.75 U	25 U	0.71 U	0.71 U	0.73 U	0.74 U	0.84 U	0.80 U	0.78 U	0.69 U	0.73 U	NA	NA
Indan[3]	496-11-7	0.75 U	25 U	0.71 U	0.71 U	0.73 U	0.74 U	0.84 U	0.80 U	0.78 U	0.69 U	0.73 U	NA	NA
Isopentane[3]	78-78-4	4.1	25 U	6.7	10	8.3	7.5	21	7.9	8.5	5.2	7.1	NA	NA
Naphthalene	91-20-3	1.6	25 U	1.1	0.71 U	0.73 U	0.74 U	1.1	0.80 U	0.78 U	0.69 U	0.73 U	NA	NA
Styrene	100-42-5	0.75 U	25 U	0.71 U	0.73	0.73 U	0.74 U	0.84 U	0.80 U	0.78 U	0.69 U	0.73 U	0.64	1.3
Thiophene[3]	110-02-1	0.75 U	25 U	0.71 U	0.71 U	0.73 U	0.74 U	0.84 U	0.80 U	0.78 U	0.69 U	0.73 U	NA	NA
Toluene	108-88-3	2.3	25 U	6.2	9.2	3.6	6.3	7.1	2.9	2.9	1.8	4.9	24.8	58
m/p-Xylenes	179601-23-1	1.5 U	50 U	2.3	2.7	1.5 U	1.7	2.2	1.6 U	1.6 U	1.4 U	1.6	4.6	12
o-Xylene	95-47-6	0.75 U	25 U	0.87	0.97	0.73 U	0.74 U	0.84 U	0.80 U	0.78 U	0.69 U	0.73 U	1.1	2.8
Not MGP Related[2]														
1,1,1-Trichloroethane	71-55-6	0.75 U	50	0.71 U	50	0.73 U	0.74 U	0.84 U	0.80 U	0.78 U	0.69 U	7.7	1.1	3.1
1,1,2,2-Tetrachloroethane	79-34-5	0.75 U	25 U	0.71 U	0.71 U	0.73 U	0.74 U	0.84 U	0.80 U	0.78 U	0.69 U	0.73 U	0.25	0.25
1,1,2-Trichloroethane	79-00-5	0.75 U	25 U	0.71 U	0.71 U	0.73 U	0.74 U	0.84 U	0.80 U	0.78 U	0.69 U	0.73 U	0.25	0.25
1,1-Dichloroethane	75-34-3	0.75 U	25 U	0.71 U	0.71 U	0.73 U	0.74 U	0.84 U	0.80 U	0.78 U	0.69 U	0.73 U	0.25	0.25
1,1-Dichloroethene	75-35-4	0.75 U	25 U	0.71 U	0.71 U	0.73 U	0.74 U	0.84 U	0.80 U	0.78 U	0.69 U	0.73 U	0.25	0.25
1,2,4-Trichlorobenzene	120-82-1	0.75 U	25 U	0.71 U	0.71 U	0.73 U	0.74 U	0.84 U	0.80 U	0.78 U	0.69 U	0.73 U	0.25	3.4
1,2-Dibromoethane (EDB)	106-93-4	0.75 U	25 U	0.71 U	0.71 U	0.73 U	0.74 U	0.84 U	0.80 U	0.78 U	0.69 U	0.73 U	0.25	0.25
1,2-Dichlorobenzene	95-50-1	0.75 U	25 U	0.71 U	0.71 U	0.73 U	0.74 U	0.84 U	0.80 U	0.78 U	0.69 U	0.73 U	0.25	0.72
1,2-Dichloroethane	107-06-2	0.75 U	25 U	0.71 U	0.71 U	0.73 U	0.74 U	0.84 U	0.80 U	0.78 U	0.69 U	0.73 U	0.25	0.25
1,2-Dichloropropane	78-87-5	0.75 U	25 U	0.71 U	0.71 U	0.73 U	0.74 U	0.84 U	0.80 U	0.78 U	0.69 U	0.73 U	0.25	0.25
1,3-Butadiene	106-99-0	0.75 U	25 U	0.71 U	0.71 U	0.73 U	0.74 U	0.84 U	0.80 U	0.78 U	0.69 U	0.73 U	NA	NA
1,3-Dichlorobenzene	541-73-1	0.75 U	25 U	0.71 U	0.71 U	0.73 U	0.74 U	0.84 U	0.80 U	0.78 U	0.69 U	0.73 U	0.25	0.6
1,4-Dichlorobenzene	106-46-7	0.75 U	25 U	0.71 U	0.71 U	0.73 U	0.74 U	0.84 U	0.80 U	0.78 U	0.69 U	0.73 U	0.54	1.3
1,4-Dioxane	123-91-1	0.75 U	25 U	0.71 U	0.71 U	0.73 U	0.74 U	0.84 U	0.80 U	0.78 U	0.69 U	0.73 U	NA	NA
2-Butanone (MEK)	78-93-3	7.5 U	250 U	7.1 U	7.1 U	7.3 U	7.4 U	8.4 U	8.0 U	7.8 U	6.9 U	7.3 U	7.3	16
Acetone	67-64-1	11	250 U	21	7.2	7.3 U	18	34	13	14	12	19	52	110
Benzyl chloride	100-44-7	0.75 U	25 U	0.71 U	0.71 U	0.73 U	0.74 U	0.84 U	0.80 U	0.78 U	0.69 U	0.73 U	NA	NA
Bromodichloromethane	75-27-4	0.75 U	25 U	0.71 U	0.71 U	0.73 U	0.74 U	0.84 U	0.80 U	0.78 U	0.69 U	0.73 U	NA	NA
Bromoform	75-25-2	0.75 U	25 U	0.71 U	0.71 U	0.73 U	0.74 U	0.84 U	0.80 U	0.78 U	0.69 U	0.73 U	NA	NA
Bromomethane	74-83-9	0.75 U	25 U	0.71 U	0.71 U	0.73 U	0.74 U	0.84 U	0.80 U	0.78 U	0.69 U	0.73 U	0.25	0.6
Carbon tetrachloride	56-23-5	0.75 U	25 U	0.71 U	0.71 U	0.73 U	0.74 U	0.84 U	0.80 U	0.78 U	0.69 U	0.73 U	0.59	0.81
Chlorobenzene	108-90-7	0.75 U	25 U	0.71 U	0.71 U	0.73 U	0.74 U	0.84 U	0.80 U	0.78 U	0.69 U	0.73 U	0.25	0.25
Chloroethane	75-00-3	0.75 U	25 U	0.71 U	0.71 U	0.73 U	0.74 U	0.84 U	0.80 U	0.78 U	0.69 U	0.73 U	0.25	0.25
Chloroform	67-66-3	0.75 U	25 U	1.4	1.1	0.73 U	0.74 U	0.84 U	0.80 U	0.78 U	0.69 U	0.91	0.54	1.4
Chloromethane	74-87-3	0.75 U	25 U	0.71 U	0.71 U	0.73 U	0.74 U	0.84 U	0.80 U	0.78 U	0.69 U	0.73 U	1.8	3.3
cis-1,2-Dichloroethene	156-59-2	0.75 U	27	0.71 U	0.71 U	7.2	1.4	0.84 U	0.80 U	0.78 U	0.69 U	0.73 U	0.25	0.25
cis-1,3-Dichloropropene	10061-01-5	0.75 U	25 U	0.71 U	0.71 U	0.73 U	0.74 U	0.84 U	0.80 U	0.78 U	0.69 U	0.73 U	0.25	0.25
Dibromochloromethane	124-48-1	0.75 U	25 U	0.71 U	0.71 U	0.73 U	0.74 U	0.84 U	0.80 U	0.78 U	0.69 U	0.73 U	NA	NA
Ethanol	64-17-5	40	250 U	140	38	28	43	1300	150	170	27	36	540	1400
Trichlorofluoromethane (Freon 11)	75-69-4	1.2	25 U	1.7	1.4	1.1	1.1	1.7	1.1	1.2	1.2	1.3	5.4	17
1,1,2-Trichlorotrifluoroethane (Freon 113)	76-13-1	0.75 U	25 U	0.71 U	0.71 U	0.73 U	0.74 U	0.84 U	0.80 U	0.78 U	0.69 U	0.73 U	1.1	1.8
1,2-Dichlorotetrafluoroethane	76-14-2	0.75 U	25 U	0.71 U	0.71 U	0.73 U	0.74 U	0.84 U	0.80 U	0.78 U	0.69 U	0.73 U	0.25	0.52
Dichlorodifluoromethane (Freon 12)	75-71-8	2.6	25 U	2.3	2.3	2.3	2.4	2.7	2.2	2.3	2.3	2.5	4.1	15
Hexachlorobutadiene	87-68-3	0.75 U	25 U	0.71 U	0.71 U	0.73 U	0.74 U	0.84 U	0.80 U	0.78 U	0.69 U	0.73 U	0.25	4.6
Methyl tert-Butyl Ether	1634-04-4	0.75 U	25 U	0.71 U	0.71 U	0.73 U	0.74 U	0.84 U	0.80 U	0.78 U	0.69 U	0.73 U	5.6	27

Table 2
Air and Soil Gas Samples- Summary of Analytical Data for Volatile Organic Compounds
March 18, 2010 - Pemart Ave. Works Former MGP, Peekskill, NY

Sample Location	CAS number	190 North Water Street				200 North Water Street					400 Main Street		NYSDOH Background Indoor Air Concentrations [a]	
Sample Type		Indoor Air	Sub Slab Soil Gas	Indoor Air	Sub Slab Soil Gas	Sub Slab/Man-hole Soil Gas	Indoor Air				Indoor Air	Sub Slab Soil Gas	75th Percentile	90th Percentile
Sample Name		IA-01	SSV-01	IA-02	SSV-02	CS-01	IA-05	IA-06	IA-07 (DUP)	IA-07	IA-03	SSV-03		
Sample Date		3/18/10	3/18/10	3/18/10	3/18/10	3/18/10	3/18/10	3/18/10	3/18/10	3/18/10	3/18/10	3/18/10		
Methylene chloride (dichloromethane)	75-09-2	0.75 U	25 U	0.71 U	0.71 U	0.73 U	0.74 U	0.84 U	0.80 U	0.78 U	0.69 U	0.73 U	6.6	22
2-Propanol	67-63-0	1.5 U	50 U	**3.0**	1.4 U	1.5 U	1.5 U	**86**	**6.2**	**6.3**	1.4 U	1.5 U	NA	NA
Propene	115-07-1	0.75 U	25 U	**1.6**	**2.2**	**1.2**	**1.5**	**21**	**2.9**	**2.7**	0.69 U	**4.0**	NA	NA
Tetrachloroethene	127-18-4	0.75 U	**68**	0.71 U	**14**	0.73 U	0.74 U	0.84 U	0.80 U	0.78 U	0.69 U	**130**	1.1	2.9
Tetrahydrofuran	109-99-9	0.75 U	25 U	0.71 U	0.71 U	0.73 U	0.74 U	0.84 U	0.80 U	0.78 U	0.69 U	0.73 U	0.35	3.3
trans-1,2-Dichloroethene	156-60-5	0.75 U	25 U	0.71 U	0.71 U	0.73 U	0.74 U	0.84 U	0.80 U	0.78 U	0.69 U	0.73 U	NA	NA
trans-1,3-Dichloropropene	10061-02-6	0.75 U	25 U	0.71 U	0.71 U	0.73 U	0.74 U	0.84 U	0.80 U	0.78 U	0.69 U	0.73 U	0.25	0.25
Trichloroethene	79-01-6	0.75 U	**4400**	0.71 U	**0.97**	**3**	**1**	0.84 U	0.80 U	0.78 U	0.69 U	0.73 U	0.25	0.48
Vinyl acetate	108-05-4	7.5 U	250 U	7.1 U	7.1 U	7.3 U	7.4 U	8.4 U	8.0 U	7.8 U	6.9 U	7.3 U	NA	NA
Vinyl chloride	75-01-4	0.75 U	25 U	0.71 U	0.71 U	0.73 U	0.74 U	0.84 U	0.80 U	0.78 U	0.69 U	0.73 U	0.25	0.25

Notes: All concentrations in units of Micrograms per cubic meter (ug/m^3)

1 - These compounds may be related to either MGP sources or non-MGP sources, or both. MGP sources include MGP tars and petroleum feedstocks used in MGP processes, such as the

2 - Non-MGP sources include cleaning products, floor wash and polish, vehicle exhaust, construction materials, and cigarette smoke.

3 - These compounds were not included in the laboratory's 2008 routine target compound list. However, the laboratory searched for them in 2008 as tentatively identified compounds (TICs) and reported estimated concentrations when identification criteria were met. They were part of the target compound list in 2010.

Compound was detected at a concentration that exceeded its **75th Percentile** NYSDOH Background Air Concentration.

Compound was detected at a concentration that exceeded its **90th Percentile** NYSDOH Background Air Concentration.

J - Compound detected at estimated concentration.

U - Compound was not detected at or above the concentration given.

NF- Compound not found when searched as TIC.

NA - Not available. No data available for background concentrations of these compounds.

NJ - Result reported is presumptively present at an estimated concentration.

NYSDOH- New York State Department of Health.

a- NYSDOH, 2006. Final NYSDOH Center for Environmental Health Soil Vapor Intrusion Guidance. Appendix C. Table C1. Indoor Air 75th and 90th values. October, 2006.

Bold - Compound was detected at concentration shown.

Figures

400 Main Street

APPROXIMATE EXTENT OF IMPACT

190 North Water Street (South)

190 North Water Street (North)

200 North Water Street

GAS HOLDER 200,000 CF TANK 104 '75

FUEL OIL TANK 35,000 GAL.

GAS HOLDER 30,000 CF

GAS HOLDER 100,000 CF (1910) HORTONSPHERE (1947)

PURIFYING HOUSE

BOILER HOUSE

STORAGE

OPERATING HOUSE

COAL SHED

TRANSFORMERS

SUBSTATION OR OPERATING PLANT

FUEL OIL TANK

COAL CONVEYOR

SMALL SUBMERGED BARGE

LARGE SUBMERGED BARGE

CHANNEL

15 0 30

SCALE IN FEET

LEGEND

- BOUNDARY OF FORMER PEMART AVE MGP
- BOUNDARY OF FORMER ELECTRIC GENERATING PLANT
- FORMER STRUCTURES
- SURFACE TOPOGRAPHY

AECOM

PEMART AVENUE FORMER MGP PEEKSKILL, NEW YORK			SITEMAP
DATE: 05/31/11	DRWN: J.E.B.		FIGURE 1

400 Main Street

APPROXIMATE EXTENT OF IMPACT

190 North Water Street (South)

190 North Water Street (North)

200 North Water Street

SSV03 IA03

SSV02 IA02

IA01 SSV01

IA06 (2nd floor)

A-05 CS-1 (crawl space)

IA07 (2nd floor)

GAS HOLDER 200,000 CF TANK DIA. 75'

GAS HOLDER 150,000 CF (1950) HORTONSPHERE (1947)

GAS HOLDER 80,000 CF

FUEL OIL TANK 25,000 GAL

COAL PILE

COAL CONVEYOR

LARGE SUBMERGED BARGE

SMALL SUBMERGED BARGE

CHANNEL

LEGEND

- IA01 INDOOR AIR SAMPLING LOCATION
- SSV01 SUB-SLAB VAPOR SAMPLING LOCATION
- BOUNDARY OF FORMER PEMART AVE MGP
- BOUNDARY OF FORMER ELECTRIC GENERATING PLANT
- FORMER STRUCTURES
- SURFACE TOPOGRAPHY

15 0 30 SCALE IN FEET

AECOM

PEMART AVENUE FORMER MGP PEEKSKILL, NEW YORK			SOIL VAPOR AND INDOOR AIR SAMPLE LOCATIONS 2010
DATE: 05/31/11	DRWN: J.E.B.		FIGURE 2

Appendix A

Sampling Information and Results – 2008 Investigation

Table A-1
Soil Gas and Indoor Air Sample Summary
Air and Soil Gas Samples Collected on June 26, 2008
Pemart Ave Former MGP, Peekskill, NY

Sample Number	Canister Number	Location	Depth of Sample Probe (inches below surface grade)	Date	Sample Duration			Canister Pressure (mmHg)		PID Screening Range (ppm)		Background Air PID Screening Range (ppm)	
					Start	Stop	Hrs:Mins.	Initial	Final	Pre	Post	Time	Bkd.
SSV01	SC00969	Indoor - lower level - wood-working shop on floor behind table saw at the center of southern wall of room	9	6/26/2008	18:00	20:33	2:33	30	4	0.8	1.5	17:40	0-1.2
IA01	AC00996	Indoor - lower level - wood-working shop on table adjacent to tablesaw along southern wall of room	NA	6/26/2008	18:00	20:34	2:34	30	1	NA	NA	17:40	0-1.2
SSV02	SC00326	Indoor - lower level - NE corner of lab office space under side table	6.5	6/26/2008	17:58	20:08	2:10 *	20	0	1.2	1.2	17:38	0-1.6
IA02	AC00285	Indoor - lower level - center of lab office at table height behind couch	NA	6/26/2008	17:59	20:28	2:29	28	1	NA	NA	17:38	0-1.6
SSV03	SC00294	Indoor - lower level - western garage floor center	10	6/26/2008	18:05	20:22	2:17	30	3	0.5	0.5	17:30	0-0.8
IA03	AC01122	Indoor - lower level - western garage on top of mini fridge on northern wall	NA	6/26/2008	18:05	20:22	2:17	28	2.5	NA	NA	17:30	0-0.8
OD-01U	AC00958	Outdoor - chair height- outside western garage of 400 Main Street	NA	6/26/2008	18:03	20:16	2:13	26.5	2	NA	NA	17:20	0
OD-02D	AC01170	Outdoor - chair height- outside NW corner of 190 North Water Street	NA	6/26/2008	17:55	20:30	2:35	30	4	NA	NA	17:25	0
SV01	SC00173	Outdoor - rock landscape area along former electric generating plant on west-side of N. Water Street	15	6/26/2008	17:50	20:42	2:52 *	29	0	4.8	2.2	17:45	0
SV01 (Duplicate)	SC00658	Outdoor - rock landscape area along former electric generating plant on west-side of N. Water Street	15	6/26/2008	17:50	20:43	2:53	30	1	4.8	2.2	NR	NR
SV02	SC01025	Outdoor - parking garage in taxi cab lot along former coal conveyor area	15.5	6/26/2008	17:02	20:50	3:48 *	26.5	0	6.2	7.2	17:50	0-1.5
SV03	SC00863	Outdoor - NW corner of 190 North Water Street	15	6/26/2008	17:56	20:31	2:35 *	29	0	0.7	0.9	17:54	0
SV04	SC1020	Outdoor - in grass area on east side of North Water Street west of former gas holder	40	6/26/2008	18:01	20:05	2:04	30	4	5.4	1.4	18:00	0
SV05	SC00473	Outdoor - asphalt paved parking lot at intersection of North Water Street and Main Street near former coal pile area	21	6/26/2008	18:07	20:13	2:06	29.5	5	NR	NR	18:05	0-0.5

Notes:
* = Indicates time of sampling stopped; however, sample canister may have drawn sample faster than 2-hour regulator based on field observations.
- Pre and Post PID screening conducted through Teflon™ tubing with the drill rod sealed with bentonite at both the concrete and the top of the rod.
- Background PID screening conducted of indoor or ambient air at each soil gas sample location.
- NA = Not Applicable
- NR = Not Recorded

Table A-2
Air and Soil Gas Samples- Summary of Analytical Data for Volatile Organic Compounds
June 26, 2008 - Pemart Ave. Works Former MGP, Peekskill, NY

Sample Location	CAS number	190 North Water Street				400 Main Street		Landscaped Area (200 N. Water Street)		Taxi Parking Lot	Outside Northwest Corner of 190 N. Water St.	Landscaped Area (North Water St.- East Side)	Municipal Parking Lot	Upwind	Downwind	NYSDOH Background Indoor Air Concentrations [a]	
Sample Type		Indoor Air	Sub Slab Soil Gas	Indoor Air	Sub Slab Soil Gas	Indoor Air	Sub Slab Soil Gas	Soil Gas						Ambient Air		75th Percentile	90th Percentile
Sample Name		IA-01	SSV-01	IA-02	SSV-02	IA-03	SSV-03	SV01	SV01 (DUP)	SV02	SV03	SV04	SV05	OD-01U	OD-02D		
Sample Date		6/26/2008	6/26/2008	6/26/2008	6/26/2008	6/26/2008	6/26/2008	6/26/2008	6/26/2008	6/26/2008	6/26/2008	6/26/2008	6/26/2008	6/26/2008	6/26/2008		
Possibly MGP Related[1]																	
1,2,3-Trimethylbenzene	526-73-8	100 U	8.5 U	3.1	NF	0.70 U	1.7	6.2 U	6.2 U	620 U	620 U	2.0 U	7.1 U	0.69 U	0.65 U	1.1	2.7
1,2,4-Trimethylbenzene	95-63-6	100 U	9.5	11	33 U	1.2	7.6	6.2 U	11	620 U	620 U	8.5	7.1 U	1.2	0.65 U	4.3	9.5
1,3,5-Trimethylbenzene	108-67-8	100 U	8.5 U	2.7	33 U	0.70 U	2.1	6.2 U	6.2 U	620 U	620 U	2.8	7.1 U	0.69 U	0.65 U	1.7	3.6
1,2,3,4-Tetramethylbenzene[3]	488-23-3	NF	NF	NF	NF	NF	NF	NF	NF	NF	NF	NF	NF	NF	NF	NA	NA
1,2,3,5-Tetramethylbenzene[3]	527-53-7	NF	NF	NF	NF	NF	NF	NF	NF	NF	NF	NF	NF	NF	NF	NA	NA
1,2,4,5-Tetramethylbenzene[3]	95-93-2	NF	NF	NF	NF	NF	NF	NF	NF	NF	NF	NF	NF	NF	NF	NA	NA
2,3-Dimethylpentane[3]	565-59-3	NF	NF	NF	NF	NF	NF	NF	NF	NF	30000 NJ	NF	NF	NF	NF	2.2	7.5
2-Hexanone	591-78-6	100 U	8.5 U	1.6 U	33 U	0.70 U	2.1	6.2 U	6.2 U	620 U	620 U	2.0 U	13	0.69 U	0.65 U	NA	NA
2-Methylpentane[3]	107-83-5	NF	NF	10 NJ	NF	NF	6	NF	NF	NF	10000 NJ	20 NJ	200 NJ	NF	NF	NA	NA
4-Ethyltoluene	622-96-8	100 U	8.5 U	3.7	33 U	0.70 U	3.4	6.2 U	6.2 U	620 U	620 U	3.9	7.1 U	0.69 U	0.65 U	NA	NA
4-Methyl-2-pentanone	108-10-1	100 U	8.5 U	1.6 U	33 U	0.70 U	2.2	6.2 U	6.2 U	620 U	620 U	2.3	7.1 U	0.69 U	0.65 U	0.86	2.2
Benzene	71-43-2	100 U	47	8.8	33 U	2.2	6.1	7.8 J	23 J	620 U	830	76	34	1.0	0.75	5.9	15
Carbon disulfide	75-15-0	100 U	110	1.6 U	33 U	0.70 U	7.6	6.2 U	8.6	620 U	620 U	5.8	10	0.69 U	0.65 U	NA	NA
Cyclohexane	110-82-7	100 U	8.5 U	1.6 U	33 U	0.70 U	1.2 U	6.2 U	6.2 U	620 U	16000	2.0 U	7.1 U	0.69 U	0.65 U	2.6	8.1
Ethylbenzene	100-41-4	100 U	510	9.8	33 U	1.2	21	41 J	150 J	620 U	620 U	130	57	1.2	0.76	2.8	7.3
Heptane	142-82-5	100 U	28	7.7	33 U	1.3	8.1	7.5 J	23 J	620 U	620 U	17	81	0.85	0.79	7.6	19
Hexane	110-54-3	100 U	20	15	33 U	2.6	10	9.0	22	620 U	14000	31	250	1.6	1.2	6	18
2,2,4-Trimethylpentane	540-84-1	100 U	8.5 U	4.5	33 U	0.93	3.1	6.2 U	11	620 U	170000	4.8	7.1 U	0.93	0.69	2.1	6.5
Indene[3]	95-13-6	NF	NF	NF	NF	NF	NF	NF	NF	NF	NF	NF	NF	NF	NF	NA	NA
Indan[3]	496-11-7	NF	NF	NF	NF	NF	NF	NF	NF	NF	NF	NF	NF	NF	NF	NA	NA
Isopentane[3]	78-78-4	NF	NF	NF	NF	5 NJ	NF	NF	NF	NF	5000 NJ	NF	400 NJ	NF	NF	NA	NA
Naphthalene	91-20-3	100 U	8.5 U	2.7	33 U	0.70 U	1.7	6.2 U	6.2 U	620 U	620 U	3.1	9.1	0.69 U	1.5	NA	NA
Styrene	100-42-5	100 U	8.5 U	1.6 U	33 U	0.70 U	1.3	6.2 U	6.2 U	620 U	620 U	2.8	7.1 U	0.69 U	0.65 U	0.64	1.3
Thiophene[3]	110-02-1	NF	NF	NF	NF	NF	NF	NF	NF	NF	NF	NF	NF	NF	NF	NA	NA
Toluene	108-88-3	100 U	1300	72	42	7.8	75	110 J	370 J	1100	870	330	150	5.7	4.8	24.8	58
m/p-Xylenes	179601-23-1	210 U	1600	42	66 U	4.7	88	130 J	490 J	1200 U	1200 U	400	230	4.4	2.8	4.6	12
o-Xylene	95-47-6	100 U	400	13	33 U	1.5	22	33 J	120 J	620 U	620 U	100	51	1.6	1.1	3.1	7.6
Not MGP Related[2]																	
1,1,1-Trichloroethane	71-55-6	100 U	180	1.6 U	89	2.2	320	14 J	55 J	990	620 U	350	300	0.69 U	0.65 U	1.1	3.1
1,1,2,2-Tetrachloroethane	79-34-5	100 U	8.5 U	1.6 U	33 U	0.70 U	1.2 U	6.2 U	6.2 U	620 U	620 U	2.0 U	7.1 U	0.69 U	0.65 U	0.25	0.25
1,1,2-Trichloroethane	79-00-5	100 U	8.5 U	1.6 U	33 U	0.70 U	1.2 U	6.2 U	6.2 U	620 U	620 U	2.0 U	7.1 U	0.69 U	0.65 U	0.25	0.25
1,1-Dichloroethane	75-34-3	100 U	8.5 U	1.6 U	33 U	0.70 U	1.2 U	6.2 U	6.2 U	620 U	620 U	11	7.1 U	0.69 U	0.65 U	0.25	0.25
1,1-Dichloroethene	75-35-4	100 U	8.5 U	1.6 U	33 U	0.70 U	4.9	6.2 U	6.2 U	620 U	620 U	3.6	7.1 U	0.69 U	0.65 U	0.25	0.25
1,2,4-Trichlorobenzene	120-82-1	100 U	8.5 U	1.6 U	33 U	0.70 U	1.2 U	6.2 U	6.2 U	620 U	620 U	2.0 U	7.1 U	0.69 U	0.65 U	0.25	3.4
1,2-Dibromoethane (EDB)	106-93-4	100 U	8.5 U	1.6 U	33 U	0.70 U	1.2 U	6.2 U	6.2 U	620 U	620 U	2.0 U	7.1 U	0.69 U	0.65 U	0.25	0.25
1,2-Dichlorobenzene	95-50-1	100 U	8.5 U	1.6 U	33 U	0.70 U	1.2 U	6.2 U	6.2 U	620 U	620 U	2.0 U	7.1 U	0.69 U	0.65 U	0.25	0.72
1,2-Dichloroethane	107-06-2	100 U	8.5 U	1.6 U	33 U	0.70 U	1.2 U	6.2 U	6.2 U	620 U	620 U	2.0 U	7.1 U	0.69 U	0.65 U	0.25	0.25
1,2-Dichloropropane	78-87-5	100 U	8.5 U	1.6 U	33 U	0.70 U	1.2 U	6.2 U	6.2 U	620 U	620 U	2.0 U	7.1 U	0.69 U	0.65 U	0.25	0.25
1,3-Butadiene	106-99-0	100 U	8.5 U	1.6 U	33 U	1.0	1.2 U	6.2 U	6.2 U	620 U	620 U	2.1	7.1 U	0.69 U	0.65 U	NA	NA
1,3-Dichlorobenzene	541-73-1	100 U	8.5 U	1.6 U	33 U	0.70 U	16	6.2 U	6.2 U	620 U	620 U	2.0 U	7.1 U	0.69 U	0.65 U	0.25	0.6
1,4-Dichlorobenzene	106-46-7	100 U	8.5 U	1.6 U	33 U	0.70 U	1.2 U	6.2 U	6.2 U	620 U	620 U	2.0 U	7.1 U	0.69 U	0.65 U	0.54	1.3
1,4-Dioxane	123-91-1	100 U	8.5 U	1.6 U	33 U	0.70 U	1.2 U	6.2 U	6.2 U	620 U	620 U	2.0 U	7.1 U	0.69 U	0.65 U	NA	NA
2-Butanone (MEK)	78-93-3	100 U	37	17	33 U	2.1	12	8.7	16	620 U	620 U	15	36	2.0	2.0	7.3	16
Acetone	67-64-1	19000	1500	1300	330 U	12	79	270 J	570 J	6200 U	6200 U	660	360 J	14 J	19	52	110
Benzyl chloride	100-44-7	100 U	8.5 U	1.6 U	33 U	0.70 U	1.2 U	6.2 U	6.2 U	620 U	620 U	2.0 U	7.1 U	0.69 U	0.65 U	NA	NA
Bromodichloromethane	75-27-4	100 U	46	1.6 U	33 U	0.70 U	51	6.2 U	13	620 U	620 U	2.0 U	90	0.69 U	0.65 U	NA	NA
Bromoform	75-25-2	100 U	8.5 U	1.6 U	33 U	0.70 U	1.2 U	6.2 U	6.2 U	620 U	620 U	2.0 U	7.1 U	0.69 U	0.65 U	NA	NA
Bromomethane	74-83-9	100 U	8.5 U	1.6 U	33 U	0.70 U	1.2 U	6.2 U	6.2 U	620 U	620 U	2.0 U	7.1 U	0.69 U	0.65 U	0.25	0.6
Carbon tetrachloride	56-23-5	100 U	8.5 U	1.6 U	33 U	0.70 U	1.2 U	6.2 U	6.2 U	620 U	620 U	2.0 U	7.1 U	0.69 U	0.65 U	0.59	0.81
Chlorobenzene	108-90-7	100 U	8.5 U	1.6 U	33 U	0.70 U	1.2 U	6.2 U	6.2 U	620 U	620 U	2.0 U	7.1 U	0.69 U	0.65 U	0.25	0.25
Chloroethane	75-00-3	100 U	8.5 U	1.6 U	33 U	0.70 U	1.2 U	6.2 U	6.2 U	620 U	620 U	2.0 U	7.1 U	0.69 U	0.65 U	0.25	0.25
Chloroform	67-66-3	120	430	13	67	0.70 U	640	60 J	230 J	1000	620 U	5.8	2200	0.69 U	0.65 U	0.54	1.4
Chloromethane	74-87-3	100 U	8.5 U	1.6 U	33 U	0.73	1.2 U	6.2 U	6.2 U	620 U	620 U	2.0 U	7.1 U	0.69 U	0.65 U	1.8	3.3
cis-1,2-Dichloroethene	156-59-2	100 U	8.5 U	1.6 U	33 U	0.70 U	1.2 U	140 J	540 J	5300	620 U	2.0 U	7.1 U	0.69 U	0.65 U	0.25	0.25
cis-1,3-Dichloropropene	10061-01-5	100 U	8.5 U	1.6 U	33 U	0.70 U	1.2 U	6.2 U	6.2 U	620 U	620 U	2.0 U	7.1 U	0.69 U	0.65 U	0.25	0.25
Dibromochloromethane	124-48-1	100 U	8.5 U	1.6 U	33 U	0.70 U	3.2	6.2 U	6.2 U	620 U	620 U	2.0 U	7.1 U	0.69 U	0.65 U	NA	NA
Ethanol	64-17-5	1000 U	85 U	89	330 U	17	350	120 J	340 J	6200 U	6200 U	260	190	32	21	540	1400
Trichlorofluoromethane (Freon 11)	75-69-4	100 U	8.5 U	1.6 U	33 U	1.8	1.8	6.2 U	6.2 U	620 U	620 U	2.1	7.1 U	1.5	1.3	5.4	17
1,1,2-Trichlorotrifluoroethane (Freon 113)	76-13-1	100 U	8.5 U	1.6 U	33 U	0.70 U	1.2 U	6.2 U	6.2 U	880	620 U	2.0 U	7.1 U	0.69	0.65 U	1.1	1.8
1,2-Dichlorotetrafluoroethane	76-14-2	100 U	8.5 U	1.6 U	33 U	0.70 U	1.2 U	6.2 U	6.2 U	620 U	620 U	2.0 U	7.1 U	0.69 U	0.65 U	0.25	0.52
Dichlorodifluoromethane (Freon 12)	75-71-8	100 U	8.5 U	2.6	33 U	2.5	2.6	6.2 U	6.2 U	620 U	620 U	3.0	7.1 U	2.7	2.3	4.1	15

Table A-2
Air and Soil Gas Samples- Summary of Analytical Data for Volatile Organic Compounds
June 26, 2008 - Pemart Ave. Works Former MGP, Peekskill, NY

Sample Location	CAS number	190 North Water Street				400 Main Street		Landscaped Area (200 N. Water Street)		Taxi Parking Lot	Outside Northwest Corner of 190 N. Water St.	Landscaped Area (North Water St.- East Side)	Municipal Parking Lot	Upwind	Downwind	NYSDOH Background Indoor Air Concentrations [a]	
Sample Type		Indoor Air	Sub Slab Soil Gas	Indoor Air	Sub Slab Soil Gas	Indoor Air	Sub Slab Soil Gas	Soil Gas						Ambient Air		75th Percentile	90th Percentile
Sample Name		IA-01	SSV-01	IA-02	SSV-02	IA-03	SSV-03	SV01	SV01 (DUP)	SV02	SV03	SV04	SV05	OD-01U	OD-02D		
Sample Date		6/26/2008	6/26/2008	6/26/2008	6/26/2008	6/26/2008	6/26/2008	6/26/2008	6/26/2008	6/26/2008	6/26/2008	6/26/2008	6/26/2008	6/26/2008	6/26/2008		
Hexachlorobutadiene	87-68-3	100 U	8.5 U	1.6 U	33 U	0.70 U	1.2 U	6.2 U	6.2 U	620 U	620 U	2.0 U	7.1 U	0.69 U	0.65 U	0.25	4.6
Methyl tert-Butyl Ether	1634-04-4	100 U	8.5 U	1.6 U	33 U	0.70 U	1.2 U	6.2 U	6.2 U	620 U	620 U	2.0 U	7.1 U	0.69 U	0.65 U	5.6	27
Methylene chloride (dichloromethane)	75-09-2	100 U	8.5 U	1.6 U	33 U	0.70 U	6.6	6.2 U	6.2 U	620 U	620 U	2.0 U	7.1 U	0.69 U	0.65 U	6.6	22
2-Propanol	67-63-0	170	13	26	42	2.5	36	8.0	21	620 U	620 U	18	24	1.6	1.1	NA	NA
Propene	115-07-1	100 U	8.5 U	1.6 U	33 U	3.4	1.2 U	6.2 UJ	40 J	620 U	620 U	2.0 U	21	0.69 U	0.65 U	NA	NA
Tetrachloroethene	127-18-4	100 U	31	1.6 U	110	0.97	7.3	6.2 U	6.2 U	3000	620 U	2.8	26	0.69 U	0.65 U	1.1	2.9
Tetrahydrofuran	109-99-9	100 U	8.5 U	1.6 U	33 U	0.70 U	1.2 U	6.2 U	6.2 U	620 U	620 U	2.0 U	7.1 U	0.69 U	0.65 U	0.35	2.3
trans-1,2-Dichloroethene	156-60-5	100 U	8.5 U	1.6 U	33 U	0.70 U	1.2 U	6.2 U	20	620 U	620 U	2.0 U	7.1 U	0.69 U	0.65 U	NA	NA
trans-1,3-Dichloropropene	10061-02-6	100 U	8.5 U	1.6 U	33 U	0.70 U	1.2 U	6.2 U	6.2 U	620 U	620 U	2.0 U	7.1 U	0.69 U	0.65 U	0.25	0.25
Trichloroethene	79-01-6	100 U	8.5 U	1.6 U	5800	0.70 U	7.8	750 J	2600 J	170000	4700	2.6	29	0.69 U	0.65 U	0.25	0.48
Vinyl acetate	108-05-4	1000 U	85 U	16 U	330 U	7.0 U	12 U	62 U	62 U	6200 U	6200 U	20 U	71 U	6.9 U	6.5 U	NA	NA
Vinyl chloride	75-01-4	100 U	8.5 U	1.6 U	33 U	0.70 U	1.2 U	6.2 U	6.2 U	620 U	620 U	2.0 U	7.1 U	0.69 U	0.65 U	0.25	0.25

Notes: All concentrations in units of Micrograms per cubic meter (ug/m^3)

1 - These compounds may be related to either MGP sources or non-MGP sources, or both. MGP sources include MGP tars and petroleum feedstocks used in MGP processes, such as the carbureted water gas process.

2 - Non-MGP sources include cleaning products, floor wash and polish, vehicle exhaust, construction materials, and cigarette smoke.

3 - These compounds were not included in the laboratory's 2008 routine target compound list. However, the laboratory searched for them in 2008 as tentatively identified compounds (TICs) and reported estimated concentrations when identification criteria were met. They were part of

Compound was detected at a concentration that exceeded its ***75th Percentile*** NYSDOH Background Air Concentration.

Compound was detected at a concentration that exceeded its ***90th Percentile*** NYSDOH Background Air Concentration.

J - Compound detected at estimated concentration.

U - Compound was not detected at or above the concentration given.

NF- Compound not found when searched as TIC.

NA - Not available. No data available for background concentrations of these compounds.

NJ - Result reported is presumptively present at an estimated concentration.

NYSDOH- New York State Department of Health.

a- NYSDOH, 2006. Final NYSDOH Center for Environmental Health Soil Vapor Intrusion Guidance. Appendix C. Table C1. Indoor Air 75th and 90th values. October, 2006.

Bold - Compound was detected at concentration shown.

Table A-3
Meteological Data for June 6, 2008
Stewart International Airport
Newburgh, New York

Hourly Observations
Month/Year: 06/2008
Station Location: STEWART INTERNATIONAL AIRPORT (14714)
Latitude: 41.504
Longitude: -74.105
Elev: 0 feet above sea level

Date	Time	Temperature	Visibility	Dew Point	Relative Humidity	Wind Speed	Wind Direction	Station Pressure	Comments
Year_Month_Day	Military Time	Degrees Fahrenheit	Miles	Degrees Fahrenheit	%	Miles per hour	Degrees	Inches Hg	
2008_06_26	45	66	15	57	73	0	0	29.48	
2008_06_26	145	66	15	59	78	0	0	29.47	
2008_06_26	245	66	15	59	78	0	0	29.46	
2008_06_26	350	68	15	59	73	0	0	29.45	
2008_06_26	440	66	15	59	78	0	0	29.45	
2008_06_26	545	66	15	61	84	0	0	29.46	
2008_06_26	645	68	15	63	84	0	0	29.46	
2008_06_26	745	70	15	61	73	0	0	29.45	
2008_06_26	845	72	10	63	73	5	240	29.43	
2008_06_26	945	72	10	63	73	7	240	29.41	
2008_06_26	1045	73	7	66	79	6	VR	29.38	
2008_06_26	1145	73	7	66	79	5	230	29.35	
2008_06_26	1245	75	7	66	74	8	260	29.34	
2008_06_26	1345	77	7	66	69	15	250	29.33	
2008_06_26	1445	77	6	66	69	9	260	29.31	
2008_06_26	1645	77	8	66	69	11	260	29.29	Air Sampling 1700 to 2100
2008_06_26	1750	79	10	68	69	7	310	29.31	Air Sampling 1700 to 2100
2008_06_26	1845	77	10	66	69	7	310	29.31	Air Sampling 1700 to 2100
2008_06_26	1950	72	10	68	87	0	0	29.31	Air Sampling 1700 to 2100
2008_06_26	2050	70	10	66	87	0	0	29.33	Air Sampling 1700 to 2100
2008_06_26	2155	70	10	66	87	0	0	29.33	
2008_06_26	2245	70	10	66	87	0	0	29.33	
2008_06_26	2348	70	10	66	87	0	0	29.33	
	Statistics								
	MAX	**79.00**	**15**	**68**	**87**	**15**	**310**	**29.48**	
	MIN	**66.00**	**6**	**57**	**69**	**0**	**0**	**29.29**	
	AVG	**71.55**	**10.957**	**63.739**	**77.348**	**3.478**	**107.273**	**29.381**	

Notes:
Stewart International Airport is approximately 24 miles Northwest of site
Source: www.ncdc.noaa.gov

400 Main Street

APPROXIMATE EXTENT OF IMPACT

190 North Water Street (South)

190 North Water Street (North)

200 North Water Street

SSV03
IA03
OD-01U
SV05
SV04
SSV02
IA02
IA01
SSV01
SV02
OD-02D
SV03
SV01
GAS HOLDER 200,000 CF TANK DIA. 175'
FUEL OIL TANK 25,000 GAL.
1 LIFT GAS HOLDER 30,000 CF
HORTONSPHERE (1947)
GAS HOLDER (1911)
OPAL HILL AREA IN 1910
BOILER HOUSE
GARAGE
STORAGE
OFFICE
FUEL OIL TANK
TRANSFORMERS
ELECTRIC GENERATING PLANT
COAL CONVEYOR
SMALL SUBMERGED BARGE
LARGE SUBMERGED BARGE
CHANNEL

LEGEND

IA01 ⊗ INDOOR AIR SAMPLING LOCATION
SSV01 ● SUBSLAB VAPOR SAMPLING LOCATION
SV01 ■ SOIL VAPOR SAMPLING LOCATION
OD-01U ▲ OUTDOOR AMBIENT AIR SAMPLING LOCATION
BOUNDARY OF FORMER PEMART AVE MGP
BOUNDARY OF FORMER ELECTRIC GENERATING PLANT
FORMER STRUCTURES
SURFACE TOPOGRAPHY

N

15 0 30
SCALE IN FEET

AECOM

PEMART AVENUE FORMER MGP
PEEKSKILL, NEW YORK

SOIL VAPOR, AMBIENT AND INDOOR AIR SAMPLING LOCATIONS 2008

DATE: 05/31/11 | DRWN: J.E.B. | | **FIGURE A-1**

Appendix B

2010 Field Sampling Forms

AECOM

Location ID: SSV_01

Soil Vapor and Air Sample Collection Record

Client: Con Edison | Date: 3/18/2010 | Time: Start 11:52 am/pm | Finish 13:53 am/pm

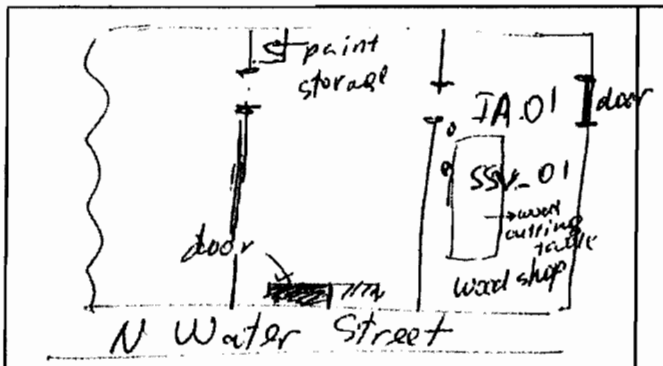
Project No: Pemart Avenue Former MGP

Site Location: Peekskill, New York

Weather Conds: Sunny, Light Breeze, ~65°F | Collector(s): M. Stepanova, S. Wright

1. LOCATION SKETCH/DESCRIPTION

Wood working area, same location as previous sampling round one.



Location

$P_{initial}$ = +/-30

P_{final} = -7

cross-sectional profile

2. SAMPLE COLLECTION

- Method: Sub-slab vapor sample w/ 6L SUMMA (2-hr regulator)

Field Testing Equipment used	Make	Model	Serial Number
Canister	~~ppb PID RAE~~		

24h

Time	PID Reading	Time	PID Reading	Time	PID Reading	Time	PID Reading
Start							
:10sec	ambient	11:52	0				
:20sec	start purging		0.5				
:30sec							
:40sec							
:50sec							
:60sec							
1 minute	Finish purging		4.1				

Highest PID Reading = 4.1

3. SAMPLE COLLECTION: Method: 2-hr flow controlled SUMMA

Sample ID	No. of Containers	Container type	Analysis Req.	Time
SSV_01	1	6L SUMMA	Expanded TO-15	

Notes:

Signature: MStep Date: 3/18/10

AECOM

Location ID: IA-01

Soil Vapor and Air Sample Collection Record

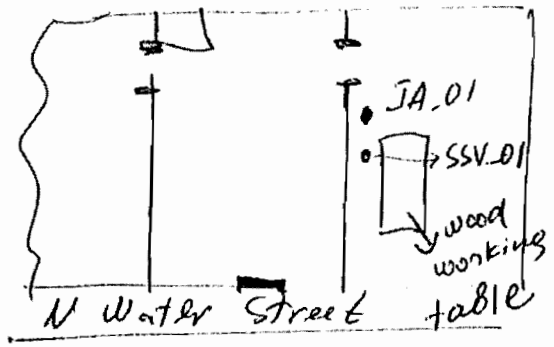
Client: Con Edison | Date: 3/18/2010 | Time: Start 11:51 am/pm | Finish 13:52 am/pm

Project No: Pemart Avenue Former MGP

Site Location: Peekskill, New York

Weather Conds: Sunny, Light Breeze, ~65°F | Collector(s): M. Stepanova, S. Wright

1. LOCATION SKETCH/DESCRIPTION



Location

P init = -29

P final = -7

cross-sectional profile

2. SAMPLE COLLECTION

Method: Sub slab vapor sample w/ SUMMA canisters (2-hr regulator)

Field Testing Equipment used | Make | Model | Serial Number

ppb PID RAE

24h

Time	PID Reading	Time	PID Reading	Time	PID Reading	Time	PID Reading
Start	0	11:51	0				
:10sec							
:20sec							
:30sec							
:40sec							
:50sec							
:60sec							
1 minute	0						

Highest PID Reading = 0

3. SAMPLE COLLECTION:

Method: 2 hr flow controlled SUMMA

Sample ID	No. of Containers	Container type	Analysis Req.	Time
IA-01	1	6L SUMMA	Expanded TO-15	

Notes:

Signature M Stepanova Date 3/18/10

AECOM

Location ID: SSV_02

Soil Vapor and Air Sample Collection Record

Client: Con Edison | Date: 3/18/2010 | Time: Start 11:46 am/pm | Finish 13:47 am/pm

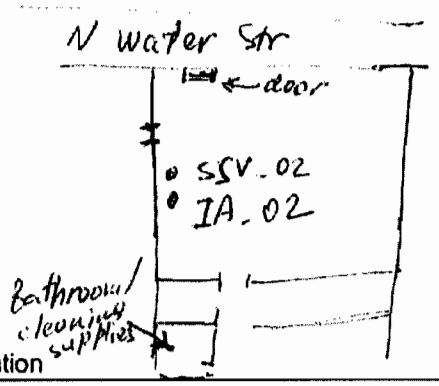
Project No: Pemart Avenue Former MGP

Site Location: Peekskill, New York

Weather Conds: Sunny, light breeze, ~65°F | Collector(s): M. Stepanova, S. Wright

1. LOCATION SKETCH/DESCRIPTION

Vacant asbestos lab. Location the same as previous sampling one but no furniture



Init pressure = -28

Fin pressure = -6

cross-sectional profile

2. SAMPLE COLLECTION

Method: Sub-slab vapor sampling w/ 6L Summa canister (2-hr regul)

Field Testing Equipment used	Make	Model	Serial Number
~~ppbRAE PID~~		canister	SC00840

24h Time	PID Reading	Time	PID Reading	Time	PID Reading	Time	PID Reading
Start							
:10sec	ambient	11:46	0				
:20sec	Start purge		1.5				
:30sec	~~Stop~~		1.9				
:40sec			↓				
:50sec							
:60sec							
1 minute	End purge		1.9				

Highest PID Reading = 1.9

3. SAMPLE COLLECTION: Method: 2-hr flow-controlled SUMMA

Sample ID	No. of Containers	Container type	Analysis Req.	Time
SSV-02	1	6L Summa	TO-15 Expanded list	

Notes:

Signature MSlep Date 3/18/10

AECOM

Location ID: IA_02

Soil Vapor and Air Sample Collection Record

Client: Con Edison | Date: 3/18/2010 | Time: Start 11:47 am/pm | Finish 13:47 am/pm

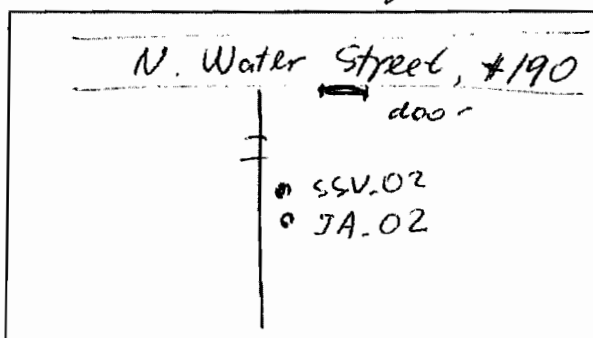
Project No: Pemart Avenue Former MGP

Site Location: Peekskill, New York

Weather Conds: Sunny, light breeze, ~65°F | Collector(s): M. Stepanova, S. Wright

1. LOCATION SKETCH/DESCRIPTION

Vacant asbestos lab, furniture removed as compared to previous sampling round



Location

Init pressure = -29

Fin pressure = -5.5

cross-sectional profile

2. SAMPLE COLLECTION

Method: Indoor Air w/ 6L SUMMA canisters (2-hr flow controller)

Field Testing Equipment used | Make | Model | Serial Number

ppb PID RAE

24h

Time	PID Reading	Time	PID Reading	Time	PID Reading	Time	PID Reading
Start							
:10sec		11:49	0				
:20sec							
:30sec							
:40sec							
:50sec							
:60sec							
1 minute			0				

Highest PID Reading = 0

3. SAMPLE COLLECTION: Method: 2-hr flow-controlled SUMMA

Sample ID	No. of Containers	Container type	Analysis Req.	Time
IA_02	1	6L SUMMA	TO-15 Expanded	

Notes:

Signature MStepp Date 3/18/10

AECOM

Location ID: SSV_03

Soil Vapor and Air Sample Collection Record

Client: Con Edison | Date: 3/18/2010 | Time: Start 12:05 am/pm | Finish 14:04 am/pm

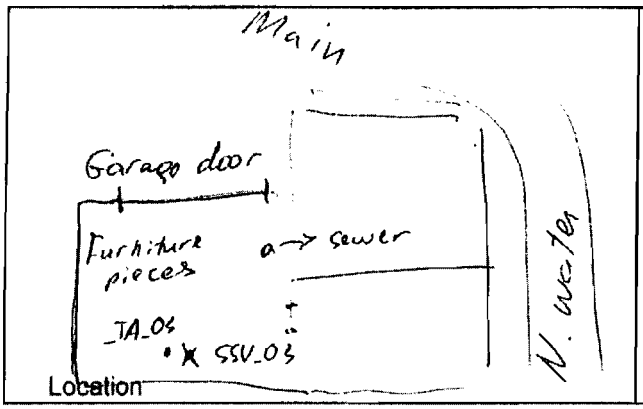
Project No: Pemart Avenue Former MGP

Site Location: Peekskill, New York

Weather Conds: sunny, light breeze, ~65°F | Collector(s): M. Stepanova, S. Wright

1. LOCATION SKETCH/DESCRIPTION

400 Main Str, thrift store with furniture pieces throughout. Previous location is carpeted, so client suggested new location, between 2 ~~con~~ concrete slabs



Pinit = -29.5

Pfin = -6

cross-sectional profile

2. SAMPLE COLLECTION

Method: sub-slab vapor sampling w/ 6L SUMMA canister (2-hr regulator)

Field Testing Equipment used	Make	Model	Serial Number
ppb PID RAE			

24h

Time	PID Reading	Time	PID Reading	Time	PID Reading	Time	PID Reading
Start							
:10sec	0						
:20sec	0.2						
:30sec	1.8						
:40sec	2.0						
:50sec	2.1						
:60sec	2.0						
1 minute	2.1						

Highest PID Reading = 2.1

3. SAMPLE COLLECTION: Method: 2-hr flow-controlled SUMMA

Sample ID	No. of Containers	Container type	Analysis Req.	Time
SSV_03	1	6L SUMMA	Expanded TO-15	

Notes:

Signature: M Stepanova Date: 3/18/2010

AECOM

Location ID: IA-03

Soil Vapor and Air Sample Collection Record

Client: Con Edison Date: 3/18/2010 Time: Start 11:59 am/pm

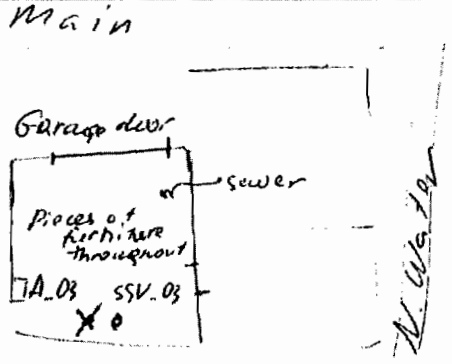
Project No: Pemart Avenue Former MGP Finish 13:54 am/pm

Site Location: Peekskill, New York

Weather Conds: sunny, light breeze, ~65°F Collector(s): M. Stepanova, S. Wright

1. LOCATION SKETCH/DESCRIPTION

400 Main Str, thrift store. Nav carpeting @ bsmt location. Co-located with new sub-slab soil vapor location



Location

P init = -28

P final = -4

cross-sectional profile

2. SAMPLE COLLECTION

Method: Indoor air sampling w/ 6L SUMMA canister (2-hr regulator)

Field Testing Equipment used | Make | Model | Serial Number

ppb PID RAE

24h Time	PID Reading	Time	PID Reading	Time	PID Reading	Time	PID Reading
Start	0						
:10sec							
:20sec							
:30sec							
:40sec							
:50sec							
:60sec							
1 minute							

Highest PID Reading = 0

3. SAMPLE COLLECTION: Method: 2-hr flow-regulated SUMMA

Sample ID	No. of Containers	Container type	Analysis Req.	Time
IA-03	1	6L SUMMA	Expanded TO-15	

Notes:

Signature M Stepanova Date 3/18/2010

AECOM

Location ID: CS_01

Soil Vapor and Air Sample Collection Record

Client: Con Edison Date: 3/18/2010 Time: Start 11:23 am/pm

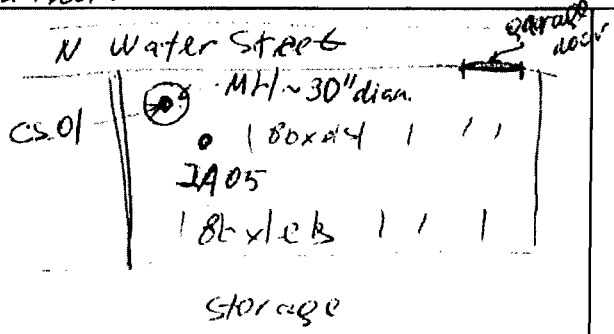
Project No: Pemart Avenue Former MGP Finish 13:23 am/pm

Site Location: Peekskill, New York

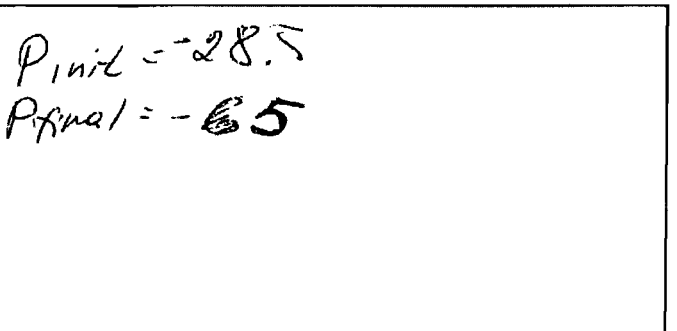
Weather Conds: sunny, light breeze, ~65°F Collector(s): M. Stepanova, S. Wright

1. LOCATION SKETCH/DESCRIPTION

200 N. Water Street, 1st floor, storage for clothes/bags/jewelry, etc. retailer. Crawl space sample taken from the slot in the manhole



Location



cross-sectional profile

2. SAMPLE COLLECTION

Method: Sub-slab vapor sample w/ 6L SUMMA canisters (w 2-hr flow controller)

Field Testing Equipment used | Make | Model | Serial Number

~~ppb PID RAE~~

24h

Time	PID Reading	Time	PID Reading	Time	PID Reading	Time	PID Reading
Start							
:10sec	ambient	1020	0				
:20sec	start purging		↓				
:30sec							
:40sec							
:50sec							
:60sec			↓				
1 minute	Finish purging		0.9				

Highest PID Reading =

3. SAMPLE COLLECTION:

Method: 2hr flow-controlled SUMMA

Sample ID	No. of Containers	Container type	Analysis Req.	Time
CS_01	1	6L SUMMA	Expanded TO-15	

Notes:

Signature: M Stepanova Date: 3/18/10

AECOM

Location ID: IA-05

Soil Vapor and Air Sample Collection Record

Client: Con Edison | Date: 3/18/2010 | Time: Start 11:15 am/pm | Finish 13:15 am/pm

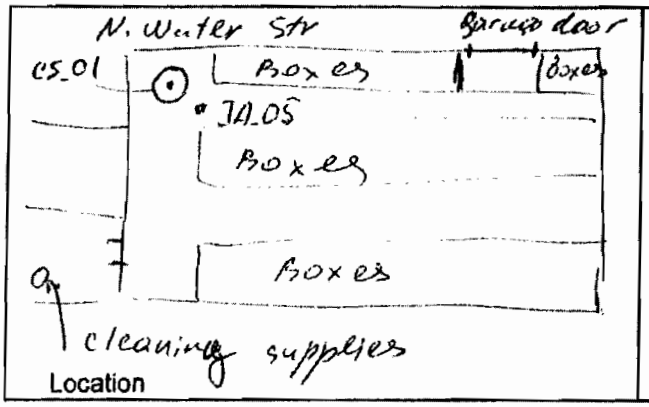
Project No: Pemart Avenue Former MGP

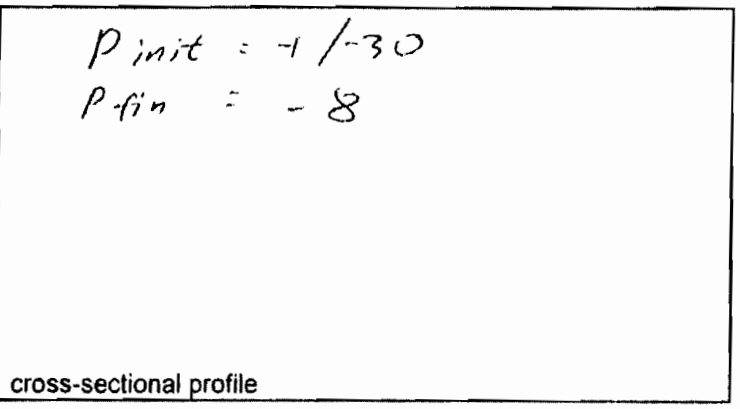
Site Location: Peekskill, New York

Weather Conds: sunny, light breeze, ~65°F | Collector(s): M. Stepanova, S. Wright

1. LOCATION SKETCH/DESCRIPTION

200 N. Water Street storage space for online retailer: clothes / bags / jewelry, etc.





2. SAMPLE COLLECTION

Method: indoor air w/ 6-L SUMMA canister (2hr controlled flow)

Field Testing Equipment used | Make | Model | Serial Number

ppb PID RAE

24h

Time	PID Reading	Time	PID Reading	Time	PID Reading	Time	PID Reading
Start							
:10sec	ambient	11:15					
:20sec							
:30sec							
:40sec							
:50sec							
:60sec							
1 minute		0	0				

Highest PID Reading = 0

3. SAMPLE COLLECTION:

Method: 2-hr flow-controlled SUMMA

Sample ID	No. of Containers	Container type	Analysis Req.	Time
IA_05	1	6-L SUMMA	Expanded TO-15	

Notes:

Signature: MStepanova Date: 3/18/10

AECOM

Location ID: IA06

Soil Vapor and Air Sample Collection Record

Client: Con Edison | Date: 3/18/2010 | Time: Start 11:41 am/pm | Finish 13:15 am/pm

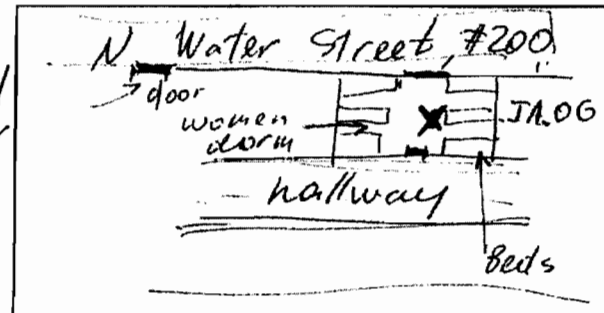
Project No: Pemart Avenue Former MGP

Site Location: Peekskill, New York

Weather Conds: sunny, light breeze, ~65 °F | Collector(s): M. Stepanova, S. Wright

1. LOCATION SKETCH/DESCRIPTION

Homeless shelter, 2nd floor, female dorm/bedroom, facing N. Water street.



Location

$P_{init} = -2.9$

$P_{final} = -8$

cross-sectional profile

2. SAMPLE COLLECTION

Method: Indoor air sampling w/ 6L SUMMA canisters (2hr regulator)

Field Testing Equipment used | Make | Model | Serial Number

~~ppb PID RAE~~

24h

Time	PID Reading	Time	PID Reading	Time	PID Reading	Time	PID Reading
Start		11:30	0				
:10sec	ambient						
:20sec							
:30sec							
:40sec							
:50sec							
:60sec							
1 minute							

Highest PID Reading = 0

3. SAMPLE COLLECTION: Method: 2-hr flow controlled SUMMA

Sample ID	No. of Containers	Container type	Analysis Req.	Time
IA06	1	6L SUMMA	TO-15 expanded	

Notes:

Signature: M Stepanova | Date: 3/18/10

AECOM

Location ID: IA_07/Dup1

Soil Vapor and Air Sample Collection Record

Client: Con Edison | Date: 3/18/2010 | Time: Start 11:36 am/pm | Finish 13:38 am/pm

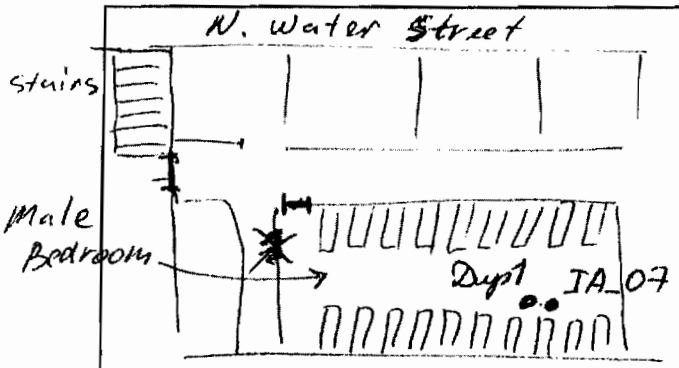
Project No: Pemart Avenue Former MGP

Site Location: Peekskill, New York

Weather Conds: sunny, slight breeze, ~65°F | Collector(s): M. Stepanova, S. Wright

1. LOCATION SKETCH/DESCRIPTION

200 N. Water Street, homeless shelter, 2nd floor, male dorm/bedroom, windows facing the river



Location

IA_07 P_{start} = 1/30
P_{finish} = -8

Dup 1 P_{start} = -28.5
P_{finish} = -5

cross-sectional profile

2. SAMPLE COLLECTION

Method: Indoor air sampling w/ 6L SUMMA canisters (2hr regulator)

Field Testing Equipment used | Make | Model | Serial Number

ppb PID RAE

24h

Time	PID Reading	Time	PID Reading	Time	PID Reading	Time	PID Reading
Start							
:10sec	0						
:20sec	0						
:30sec	0						
:40sec							
:50sec							
:60sec							
1 minute							

Highest PID Reading = 0

3. SAMPLE COLLECTION: Method: 2-hr flow-controlled SUMMA

Sample ID	No. of Containers	Container type	Analysis Req.	Time
IA_07	1	6L SUMMA	TO-15 expanded	
Dup-1	1	6L SUMMA	"	

Notes:

Signature M Stepanova Date 3/18/2010

Appendix C

2010 Questionnaire and Survey Forms

OSR-3

NEW YORK STATE DEPARTMENT OF HEALTH
DIVISION OF ENVIRONMENTAL HEALTH ASSESSMENT
BUREAU OF TOXIC SUBSTANCE ASSESSMENT

INDOOR AIR QUALITY QUESTIONNAIRE AND BUILDING INVENTORY

This form must be completed for each residence involved in indoor air testing.

Preparer's Name Maria Stepanova Date Prepared 3/18/2010

(updated from previous inventory-6/08)

Preparer's Affiliation AECOM Phone No. 845-206-8765

1. **OCCUPANT**

Name: Dominic Perruccio

Address: 190 N. Water Street (South)

Peekskill, NY

County: Westchester

Home Phone No. _____ Office Phone No. 9147342119

2. **OWNER OR LANDLORD:**
(If different than occupant)

Name: _____

Address: _____

_____

Phone No. _____

A. Building Construction Characteristics

Type (circle appropriate responses): Single Family Multiple Dwelling (Commercial) Public School
Lab- Asbestos Testing

Ranch	2-Family
Raised Ranch	Duplex
Split Level	Apartment House _____ Units
Colonial	Number of floors 1
Mobile Home	Other specify _____

Residence Age Appr. 50 yrs General Description of Building Construction Materials Concrete

Is the building insulated? Yes (No) How air tight is the building? Average.

OSR-3 (continued)

B. Basement construction characteristics (circle all that apply):

1. Full basement, crawlspace, slab on grade, other
2. Basement floor: concrete, dirt, other
3. Basement floor: uncovered, covered, with carpet, painted, laminant floor tiles
4. Concrete floor: unsealed, sealed; with paint
5. Foundation walls: poured concrete, block, laid up stone, other brick
6. The basement is: wet, damp, dry Dry Sump present? y/n N Water in sump? y/n NA
7. The basement is: finished, unfinished Finished.
8. Identify potential soil vapor entry points (e.g., cracks, utility ports, etc.)
   Utilities from site/overhead.
9. Describe how air tight the basement is

C. HVAC (circle all that apply):

1. The type of heating system(s) used in this residence is/are:

Hot Air Circulation	Heat Pump
Hot Water Radiation	Unvented Kerosene Heater
Steam Radiation	Wood stove
Electric Baseboard	Other (specify) Hot Water Casting Unit

2. The type(s) of fuel(s) used is/are: Natural Gas, Fuel Oil, Electric, Wood, Coal Solar
   Other (specify)
3. Is the heating system's power plant located in the basement or another area: Main Floor.
4. Is there air-conditioning? Yes / No Central Air or Window Units? Window units.
   Specify the location
5. Are there air distribution ducts present? Yes / No
6. Describe the supply and cold air return duct work in the basement including whether there is a cold air return, the tightness of duct joints

D. Potential Indoor Sources of Pollution

1. Has the house ever had a fire? Yes / (No)
2. Is there an attached garage? Yes / (No)
3. Is a vehicle normally parked in the garage? Yes / (No)
4. Is there smoking in the building? Yes / (No)
5. Is there a kerosene heater present? Yes / (No)
6. Is there a workshop, hobby or craft area in the residence? Yes / (No)
7. Have cleaning products been used recently? (Yes) / No When & Type? Regular office/kitchen cleaning.
8. Have cosmetic products been used recently? Yes / (No) When & Type? _____
9. Has painting/staining been done in the last 6 months? Yes / (No) Where & When? _____
10. Is there new carpet, drapes or other textiles? (Yes) / No Where & When? Carpet and furniture has been removed since last sampling round.
11. Have air fresheners been used recently? (Yes) / No Where & When? _____
12. Is there a bathroom exhaust fan? (Yes) / No Where is it vented? _____
13. Is there a clothes dryer? Yes / (No) If yes, is it vented outside? Yes/No
14. Has there been a pesticide application? Yes / (No) Where & Type? _____
15. An inventory of all products used or stored in the home should be performed. Any products that contain volatile organic compounds or chemicals similar to the target compounds should be listed. The attached product inventory form should be used for this purpose.
16. Is there a kitchen exhaust fan? Yes / (No) Where is it vented? _____
17. Are there odors in the building? Yes / (No) If yes, describe _____
18. Do any of the building occupants use solvents at work? (Yes) / No
    If yes, what types of solvents are used? Acetone, propanol
    If yes, are their clothes washed at work? Y/(N)
19. Do any of the building occupants use or regularly work at a dry-cleaning service (circle response)?
    Yes, use dry-cleaning regularly (weekly) (No)
    Yes, use dry-cleaning infrequently (monthly or less) Unknown
    Yes, work at a dry-cleaning service
20. Is there a radon mitigation system for the building/structure? Y/(N) Date of Installation: _____

E. **Water and Sewage (Circle the appropriate response)**

Source of Water

(Public Water) Drilled Well Driven Well Dug Well Other (Specify)_____

Water Well Specifications: NOT APPLICABLE (NA)

Well Diameter _____ Grouted or Ungrouted _____

Well Depth _____ Type of Storage Tank _____

Depth to Bedrock _____ Size of Storage Tank _____

Feet of Casing _____ Describe type(s) of Treatment _____

_____

Water Quality: NA

Taste and/or odor problems? y / n If so, describe _____

How long has the taste and/or odor been present _____

Sewage Disposal: (Public Sewer) Septic Tank Leach Field Other (Specify) _____

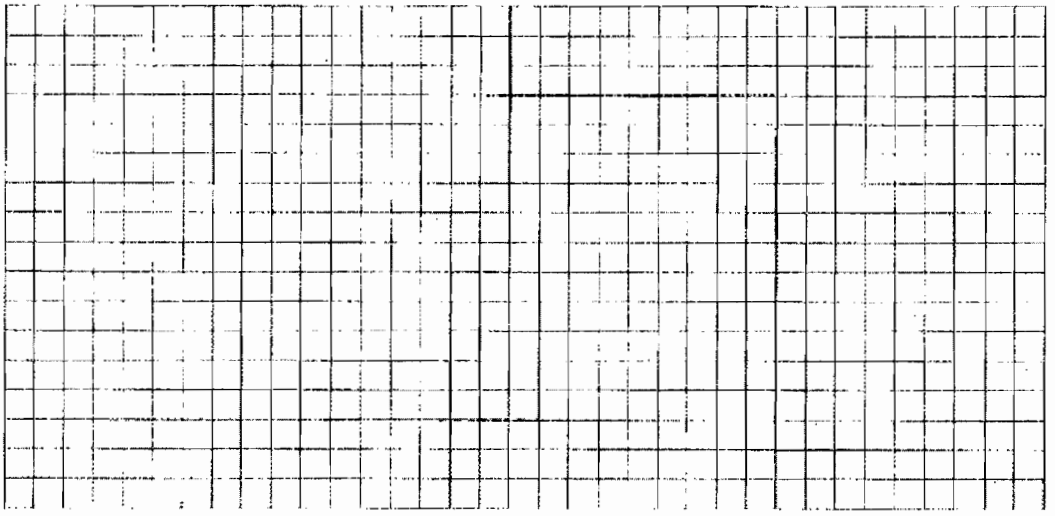
Distance from well to septic system_____ Type of septic tank additive _____

OSR-3 (continued)

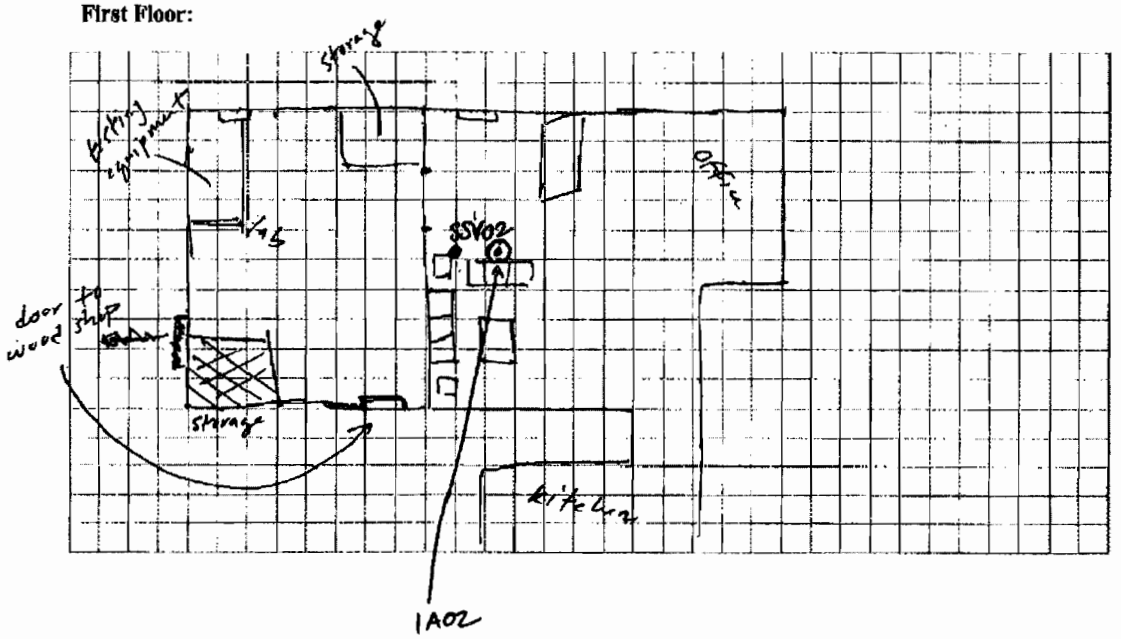
F. Plan View

Draw a plan view sketch for each floor of the residence and if applicable, indicate air sampling locations, possible indoor air pollution sources and PID meter readings.

Basement: None



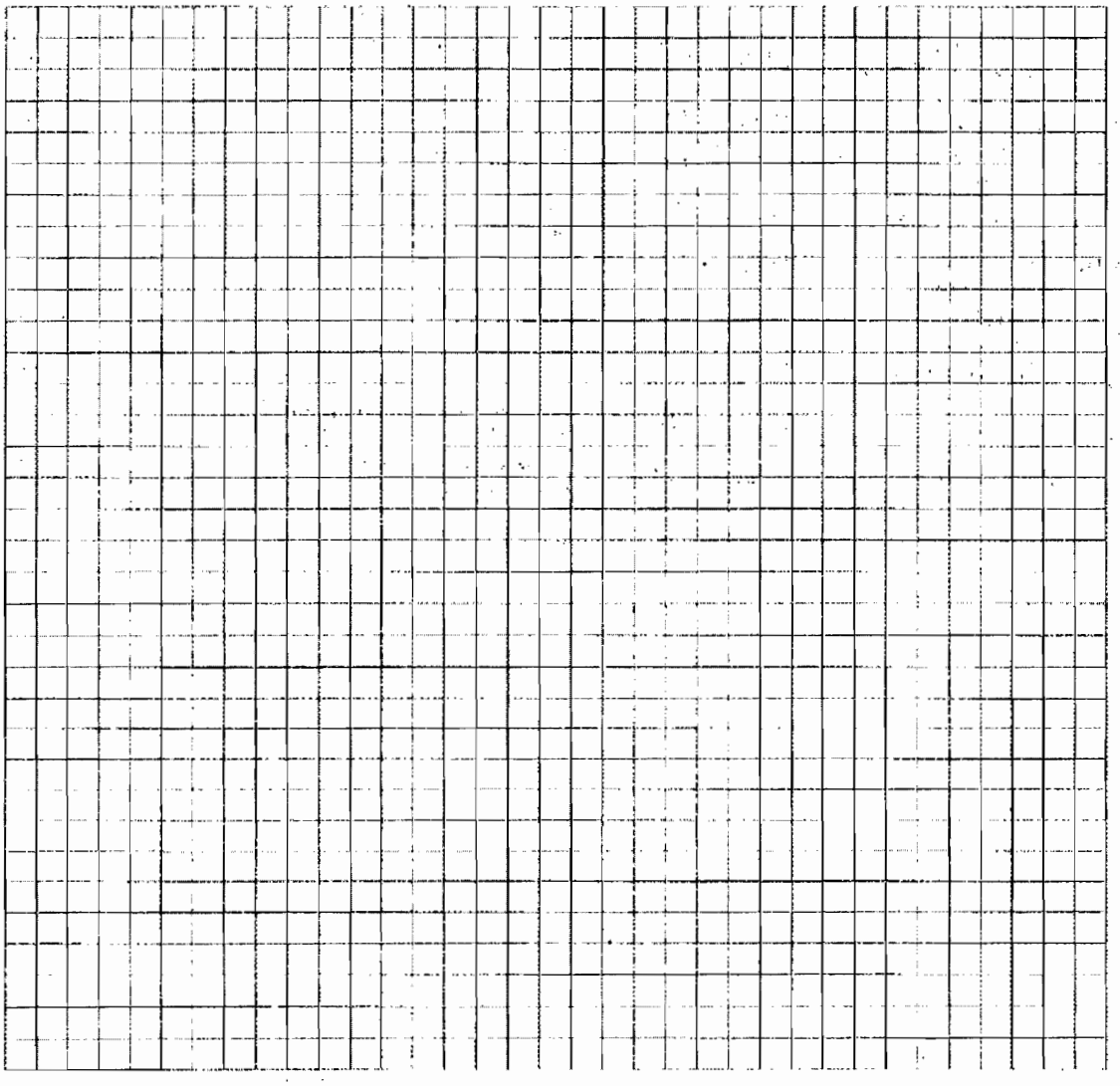
First Floor:



G. Potential Outdoor Sources of Pollution

Draw a sketch of the area surrounding the residence being sampled. If applicable, provide information on the spill location (if known), potential air contamination sources (industries, gas stations, repair shops, landfills, etc.), outdoor air sampling location(s) and PID meter readings.

Also indicate compass direction, wind direction and speed during sampling, the locations of the well and septic system if applicable, and a qualifying statement to help locate the site on a topographical map.



Household Products Inventory

Occupant / residence 190 N. Water Street (South), Peekskill, NY

Investigator: Maria Stepanova Date: 3/18/2010

Location	Product Description (dispenser, size, manufacturer...)	Ingredients	Additional Comments
Office	Rust Oleum Protective Enamel (32 oz)	Oil-based enamel	Unopened
Office	Rust Oleum Metallic Metal Finish (11 oz)		Used
Office	Dry Lock Plug Hydraulic Cement (3 lbs)	Portland Cement and Lime	Used
Office/Kitchen	Furniture Polish (12.5 oz)	Furniture polish with lemon oil by Power House	Used
Office/Kitchen	Wallboard Joint Compound (32 oz)		Used
Office/Kitchen	Lysol (19 oz)		Used
Office/Kitchen	Air Freshener (9.7 oz)		Used
Office/Kitchen	Ice Melt (12 lbs)	Styrene Acrylic Polymer, ethylene glycol	Used
Office/Kitchen	Paint (32 oz)	Interior semi-gloss paint, vinyl polymer, titanium dioxide	Used

Location	Product Description (dispenser, size, manufacturer...)	Ingredients	Additional Comments
Bathroom	Clorox Bathroom Cleaner (30 oz)		Used
Bathroom	Enforcer 10-min Hair Clog Remover (64 oz)		Used
Bathroom	Moist Wipes		Used
Bathroom	Oust Air Freshener (19 oz)		Used
Bathroom	Lysol Cling Gel Toilet Cleaner (14 oz)		Used

Note: Substantially the same as inventory from 6/28/2008.

OSR-3

NEW YORK STATE DEPARTMENT OF HEALTH
DIVISION OF ENVIRONMENTAL HEALTH ASSESSMENT
BUREAU OF TOXIC SUBSTANCE ASSESSMENT

INDOOR AIR QUALITY QUESTIONNAIRE AND BUILDING INVENTORY

This form must be completed for each residence involved in indoor air testing.

Preparer's Name Maria Stepanova Date Prepared 3/18/2010

(updated from previous inventory-6/08)

Preparer's Affiliation AECOM Phone No. 845-206-8765

1. **OCCUPANT**

Name: Tom Allen

Address: 190 N. Water Street (North)

Peekskill, NY

County: Westchester

Home Phone No. _____ Office Phone No. _____

2. **OWNER OR LANDLORD:**
(If different than occupant)

Name: Mark Goldfarb

Address: 190 N. Water Street

Westchester

Phone No. _____

A. Building Construction Characteristics

Type (circle appropriate responses): Single Family Multiple Dwelling (Commercial) Public School
Wood working building

Ranch	2-Family
Raised Ranch	Duplex
Split Level	Apartment House _____ Units
Colonial	Number of floors 1
Mobile Home	Other specify _____

Residence Age 1880 General Description of Building Construction Materials Concrete

Is the building insulated? Yes (No) How air tight is the building?

OSR-3 (continued)

B. Basement construction characteristics (circle all that apply): No basement, 1st floor on slab.

1. Full basement, crawlspace, (slab) on grade, other
2. Basement floor: (concrete), dirt, other
3. Basement floor: (uncovered) covered, with _____
4. Concrete floor: unsealed, (sealed); with paint
5. Foundation walls: poured concrete, block, laid up stone, other brick
6. The basement is: wet, damp, dry Dry Sump present? y/n (N) Water in sump? y/n NA
7. The basement is: finished, unfinished _____
8. Identify potential soil vapor entry points (e.g., cracks, utility ports, etc.)
   Utilities from overhead, there are no utilities from the ground.
9. Describe how air tight the basement is _____

C. HVAC (circle all that apply):

1. The type of heating system(s) used in this residence is/are:

Hot Air Circulation	Heat Pump
Hot Water Radiation	Unvented Kerosene Heater
Steam Radiation	Wood stove
Electric Baseboard	Other (specify) Hot Water Ceiling Units

2. The type(s) of fuel(s) used is/are: Natural Gas, (Fuel Oil), Electric, Wood, Coal Solar
   Other (specify)_____
   Domestic hot water tank fueled by: gas
3. Is the heating system's power plant located in the basement or another area: Main Floor.
4. Is there air-conditioning? Yes /(No) Central Air or Window Units? NA
   Specify the location _____
5. Are there air distribution ducts present? Yes / (No)
6. Describe the supply and cold air return duct work in the basement including whether there is a cold air return, the tightness of duct joints

D. Potential Indoor Sources of Pollution

1. Has the house ever had a fire? Yes / (No)
2. Is there an attached garage? Yes / (No)
3. Is a vehicle normally parked in the garage? (Yes) / No Motorcycle
4. Is there smoking in the building? Yes / (No)
5. Is there a kerosene heater present? Yes / (No)
6. Is there a workshop, hobby or craft area in the residence? (Yes) / No
7. Have cleaning products been used recently? Yes / (No) When & Type? _____
8. Have cosmetic products been used recently? Yes / (No) When & Type? _____
9. Has painting/staining been done in the last 6 months? (Yes) / No Where & When? Regularly due to wood work business
10. Is there new carpet, drapes or other textiles? Yes / (No) Where & When? _____
11. Have air fresheners been used recently? Yes / (No) Where & When? _____
12. Is there a bathroom exhaust fan? Yes / (No) Where is it vented? _____
13. Is there a clothes dryer? Yes / (No) If yes, is it vented outside? Yes/No
14. Has there been a pesticide application? Yes / (No) Where & Type? _____
15. An inventory of all products used or stored in the home should be performed. Any products that contain volatile organic compounds or chemicals similar to the target compounds should be listed. The attached product inventory form should be used for this purpose.
16. Is there a kitchen exhaust fan? Yes / (No) Where is it vented? _____
17. Are there odors in the building? (Yes) / No If yes, describe Paint and Stain Odors
18. Do any of the building occupants use solvents at work? (Yes)/No
    If yes, what types of solvents are used? Mineral Spirits
    If yes, are their clothes washed at work? Y/(N)
19. Do any of the building occupants use or regularly work at a dry-cleaning service (circle response)?
    Yes, use dry-cleaning regularly (weekly) No
    Yes, use dry-cleaning infrequently (monthly or less) (Unknown)
    Yes, work at a dry-cleaning service
20. Is there a radon mitigation system for the building/structure? Y/(N) Date of Installation: _____

E. Water and Sewage (Circle the appropriate response)

Source of Water

(Public Water) Drilled Well Driven Well Dug Well Other (Specify)_____

Water Well Specifications: NOT APPLICABLE (NA)

Well Diameter _____ Grouted or Ungrouted _____

Well Depth _____ Type of Storage Tank _____

Depth to Bedrock _____ Size of Storage Tank _____

Feet of Casing _____ Describe type(s) of Treatment _____

_____

Water Quality: NA

Taste and/or odor problems? y / n If so, describe _____

How long has the taste and/or odor been present _____

Sewage Disposal: (Public Sewer) Septic Tank Leach Field Other (Specify) _____

Distance from well to septic system_____ Type of septic tank additive _____

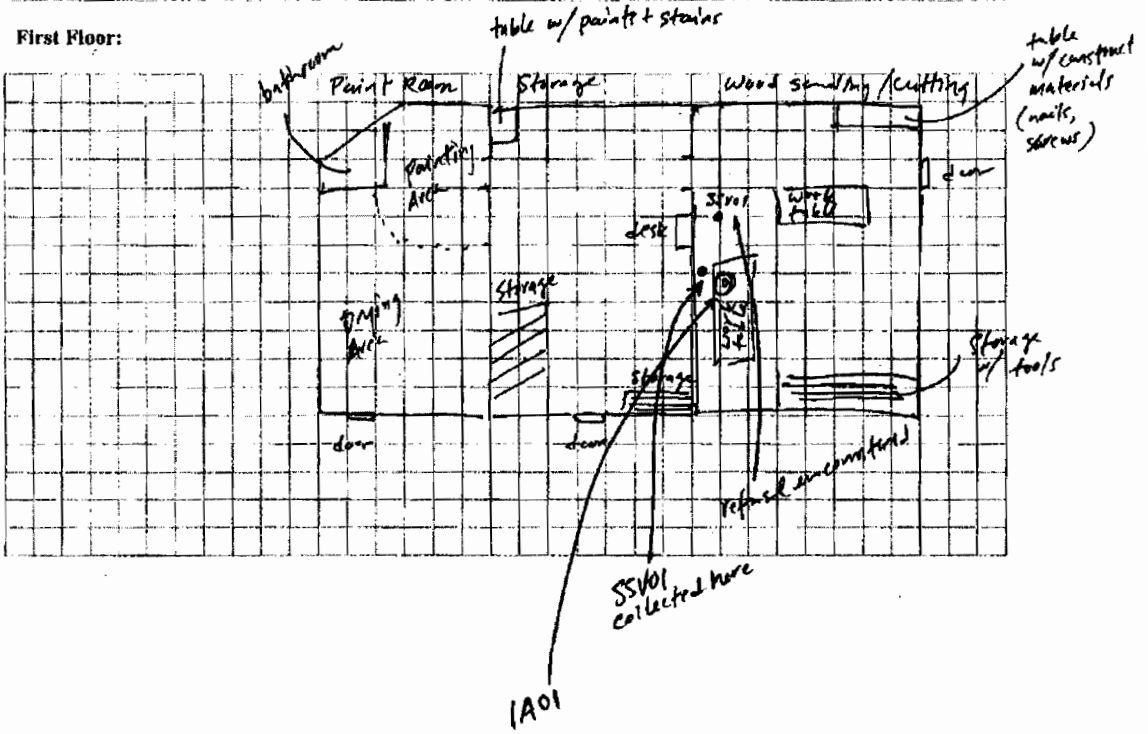
OSR-3 (continued)

F. Plan View

Draw a plan view sketch for each floor of the residence and if applicable, indicate air sampling locations, possible indoor air pollution sources and PID meter readings.

Basement: On Slab — no sub floors.

First Floor:

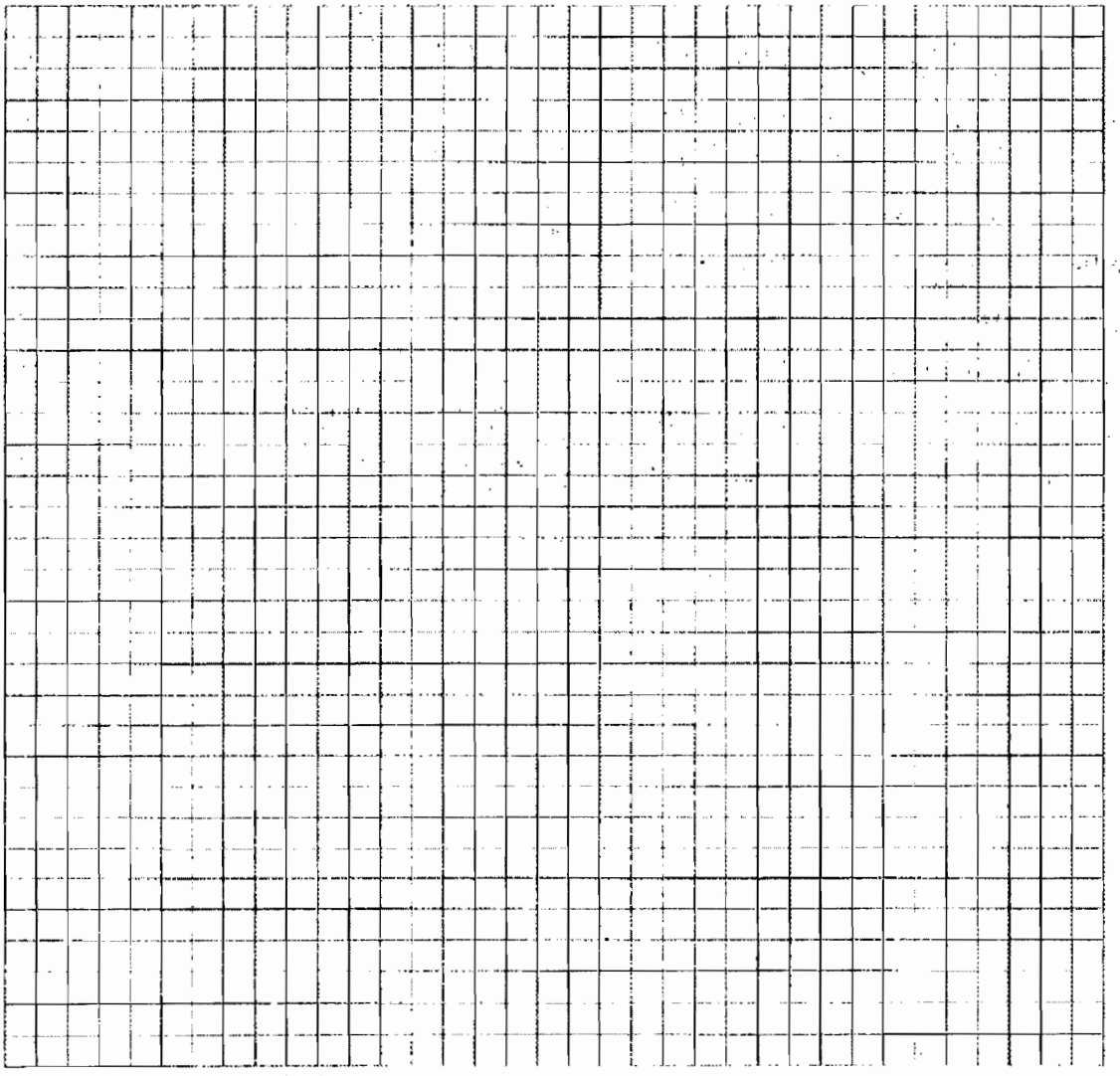


OSR-3 (continued)

G. Potential Outdoor Sources of Pollution

Draw a sketch of the area surrounding the residence being sampled. If applicable, provide information on the spill location (if known), potential air contamination sources (industries, gas stations, repair shops, landfills, etc.), outdoor air sampling location(s) and PID meter readings.

Also indicate compass direction, wind direction and speed during sampling, the locations of the well and septic system if applicable, and a qualifying statement to help locate the site on a topographical map.



Household Products Inventory

Occupant / residence 190 N. Water Street (North), Peekskill, NY

Investigator: Maria Stepanova Date: 3/18/2010

Location	Product Description (dispenser, size, manufacturer...)	Ingredients	Additional Comments
WW-BR	30 Wood Finish Stain & Polyurethane Seal (32 oz)	MiniWax (wax-based stain)	Unopened/Used MiniWax Co. Saddle River, NJ
WW-BR	Watco-Danish Oil Finish (1 pint)		Unopened/Used Watco-Oleum Co. Vernon Hills, IL
WW-BR	Zinssen Cover Stain Primer-Sealer (1 gal)	Product # 03551, High Hide Base Oil	Unopened/Used Zinsser Co (800-225-8543)
WW-BR	Pro Finisher – Water Based Polyurethane (1 gal)		Unopened/Used
WW-BR	Gemini Coatings (WB-0230) (1 gal)	2 butoxethanol/111-76-2 water-borne acrylic satin	Unopened
WW-BR	White Satin Paint (116oz)	Latex-acrylic paint	Used
WW-BR	Mineral Spirits (1 gal)		Used Barr Product #GKSP94006 bleanstrip.com
WW-BR	Elmer's Carpenter Wood Filler (3.25 oz)		Used
WW-BR	WD-40 (10 oz)		Used WD40.com for MSDS

Location	Product Description (dispenser, size, manufacturer...)	Ingredients	Additional Comments
WW-BR	4-strike motorcycle oil SAE10W-40SJ (32 oz)		Used
WW-GH	Contact Cement (32 oz)		Used
WW-BR	Mohawk Glazing Stain (M114-0224) (6 x 13 oz)	Aliphatic petroleum, allied resin, isobutene, methanol, xylene, BTEX, silica, 1-2-4, trimethylbenzene, butanol	Used

Notes:
Substantially the same as inventory from 6/28/2008.
WW – Wood Working Studio
BR – Former Boiler Room
GH – Former Generating House

OSR-3

NEW YORK STATE DEPARTMENT OF HEALTH
DIVISION OF ENVIRONMENTAL HEALTH ASSESSMENT
BUREAU OF TOXIC SUBSTANCE ASSESSMENT

INDOOR AIR QUALITY QUESTIONNAIRE AND BUILDING INVENTORY

This form must be completed for each residence involved in indoor air testing.

Preparer's Name Maria Stepanova Date Prepared 3/18/2010

Preparer's Affiliation AECOM Phone No. 845-206-8765

1. **OCCUPANT**

Name: Jan Peek Homeless Shelter

Address: 200 N. Water Street

Peekskill, NY

County: Westchester

Home Phone No. _____ Office Phone No. _____

2. **OWNER OR LANDLORD:**
(If different than occupant)

Name: _____

Address: _____

_____

Phone No. _____

A. Building Construction Characteristics

Type (circle appropriate responses): Single Family Multiple Dwelling Commercial Public School

Ranch	2-Family
Raised Ranch	Duplex
Split Level	Apartment House _____ Units
Colonial	Number of floors _____
Mobile Home	Other specify 1st floor – retail storage, 2nd floor – homeless shelter

Residence Age _____ General Description of Building Construction Materials Brick, wood, and steel.

Is the building insulated? Yes/No How air tight is the building? 2nd floor – air tight, 1st floor – not airtight.

OSR-3 (continued)

B. Basement construction characteristics (circle all that apply): 1st floor acts as basement. Please take into account below.

1. Full basement, (crawlspace), (slab on grade), other
2. Basement floor: (concrete), dirt, other
3. Concrete floor: unsealed, (painted), covered; with _____
4. Foundation walls: poured concrete, block, laid up stone, other primarily block.
5. The basement is: wet, damp, dry Dry Sump present? y/(n) N Water in sump? y/n NA
6. The basement is: finished, unfinished Finished.
7. Identify potential soil vapor entry points (e.g., cracks, utility ports, etc.)
   Manhole.
8. Describe how air tight the basement is Not very airtight. There is a garage door and closed windows.

C. HVAC (circle all that apply):

1. The type of heating system(s) used in this residence is/are:

Hot Air Circulation	Heat Pump
Hot Water Radiation	Unvented Kerosene Heater
Steam Radiation	Wood stove
Electric Baseboard	Other (specify) Hot Water Ceiling Unit

2. The type(s) of fuel(s) used is/are: Natural Gas, Fuel Oil, Electric, Wood, Coal Solar
   Other (specify)_____
3. Is the heating system's power plant located in the basement or another area: _____
4. Is there air-conditioning? (Yes) No Central Air or Window Units? Central air.
   Specify the location _____
5. Are there air distribution ducts present? Yes (No)
6. Describe the supply and cold air return duct work in the basement including whether there is a cold air return, the tightness of duct joints
   NA

D. Potential Indoor Sources of Pollution

1. Has the house ever had a fire? Yes (No) _____.
2. Is there an attached garage? Yes (No)
3. Is a vehicle normally parked in the garage? Yes (No)
4. Is there a kerosene heater present? Yes (No)
5. Is there a workshop, hobby or craft area in the residence? Yes (No)
6. An inventory of all products used or stored in the home should be performed. Any products that contain volatile organic compounds or chemicals similar to the target compounds should be listed. The attached product inventory form should be used for this purpose.
7. Is there a kitchen exhaust fan? Yes (No) Where is it vented? Outside
8. Has the house ever been fumigated? If yes describe date, type and location of treatment.
   Pest control perform weekly inspections and sometimes use spray (Raid).

E. Water and Sewage (Circle the appropriate response)

Source of Water

(Public Water) Drilled Well Driven Well Dug Well Other (Specify)_____

Water Well Specifications: NOT APPLICABLE (NA)

Well Diameter _____ Grouted or Ungrouted _____

Well Depth _____ Type of Storage Tank _____

Depth to Bedrock _____ Size of Storage Tank _____

Feet of Casing _____ Describe type(s) of Treatment _____

_____

Water Quality: NA

Taste and/or odor problems? y / n If so, describe _____

How long has the taste and/or odor been present _____

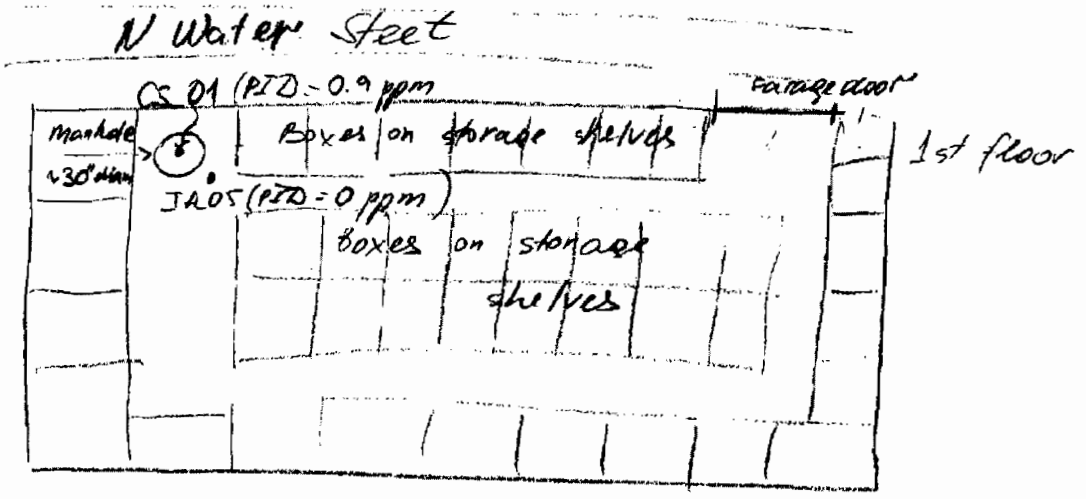
Sewage Disposal: Public Sewer Septic Tank Leach Field Other (Specify) _____

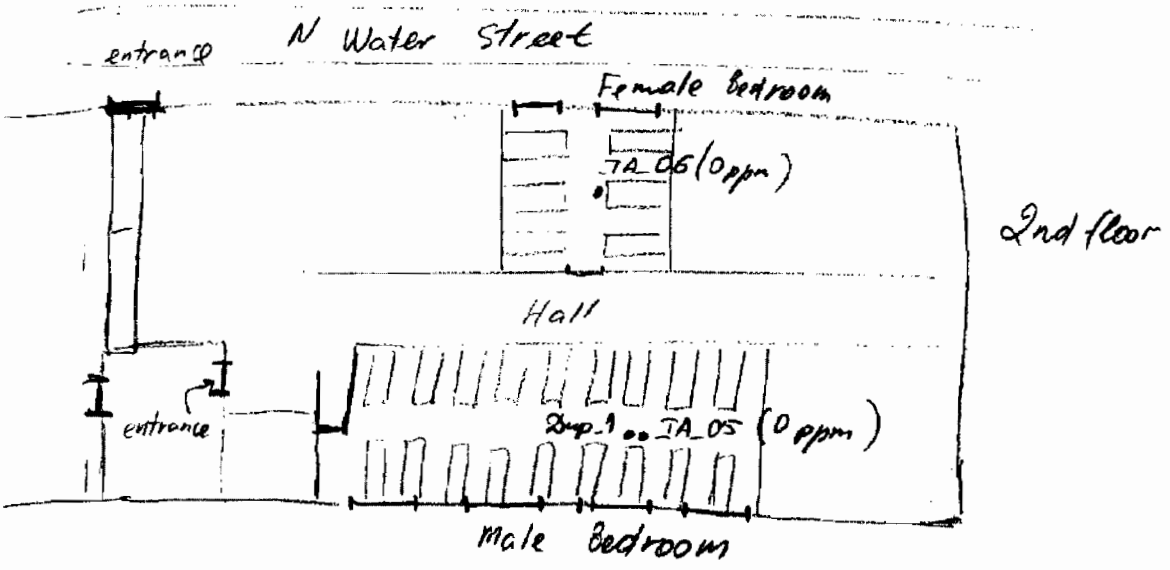
Distance from well to septic system _____ Type of septic tank additive _____

OSR-3 (continued)

F. Plan View

Draw a plan view sketch for each floor of the residence and if applicable, indicate air sampling locations, possible indoor air pollution sources and PID meter readings.



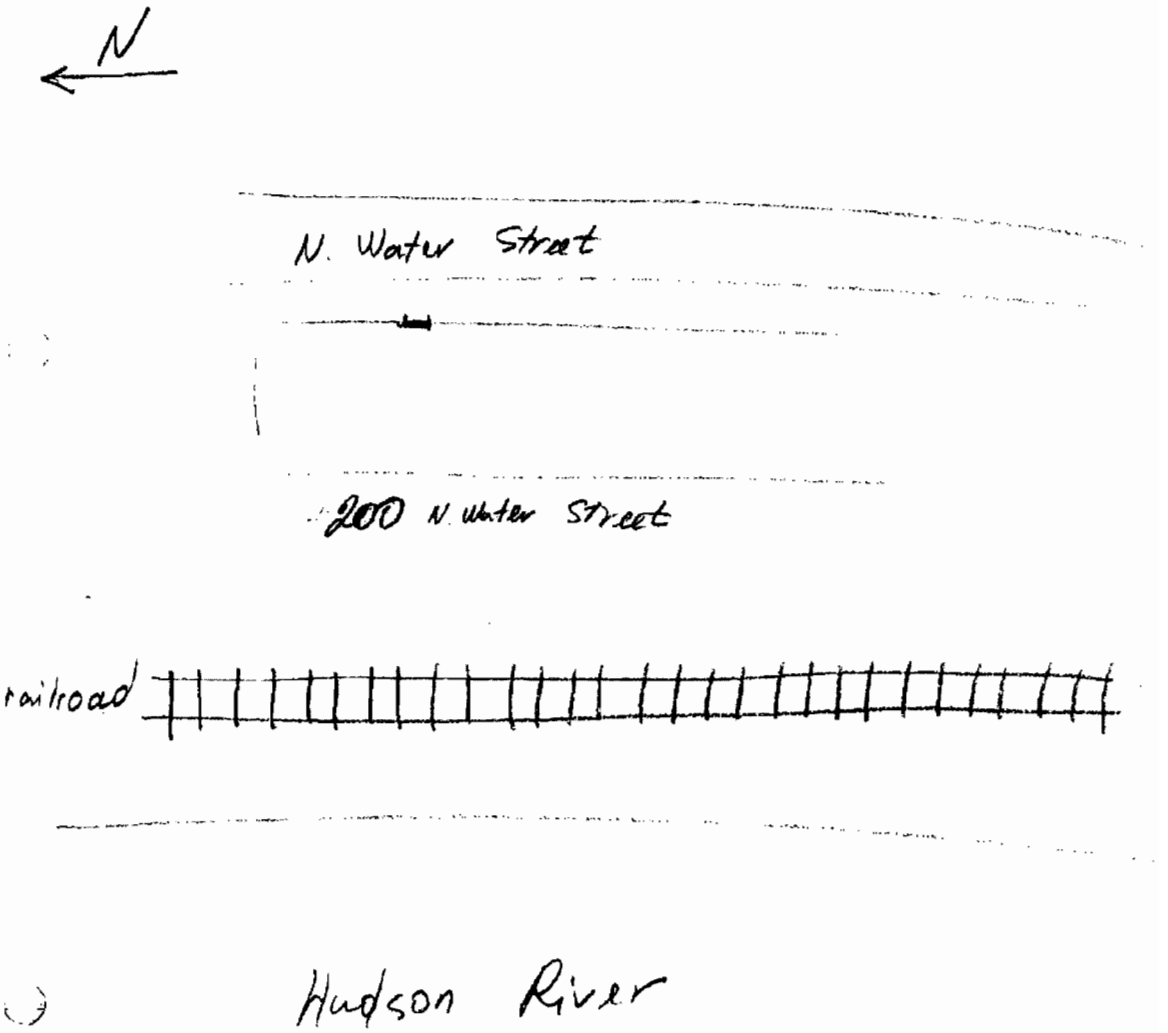


OSR-3 (continued)

G. Potential Outdoor Sources of Pollution

Draw a sketch of the area surrounding the residence being sampled. If applicable, provide information on the spill location (if known), potential air contamination sources (industries, gas stations, repair shops, landfills, etc.), outdoor air sampling location(s) and PID meter readings.

Also indicate compass direction, wind direction and speed during sampling, the locations of the well and septic system if applicable, and a qualifying statement to help locate the site on a topographical map.



Household Products Inventory

Occupant / residence 200 N. Water Street, Peekskill, NY

Investigator: Maria Stepanova Date: 3/18/2010

Location	Product Description (dispenser, size, manufacturer...)	VOC Ingredients	Additional Comments
Supply Closet	Lysol Disinfectant Spray (20 cans)	ethanol	
	Raid Spray (18 oz)	Isoparrafin Hydrocarbon	
	Scotch Gard	Ethylbenzene, 1-methylethylbenzene, isobutene, 1,1-difluoroethane, ethanol	
	Gold Coat Floor Finish (2 Gal)	NA	
	Great Stuff Foam Sealant	4,4-diphenylmethane diisocyanate	
	Rest Easy Bed Bug Spray (12 x 16 fl ounces)	NA	
	Hair Detangler (8 ounces)	NA	
	Cabinet Magic Wood Treatment (5 oz)	Hyrdrolated light petroleum distillate	Possibly containing cyclohexane
	Aqua Clear	Dicylcohexylmethane	Breaks down to containing cyclohexane

OSR-3

NEW YORK STATE DEPARTMENT OF HEALTH
DIVISION OF ENVIRONMENTAL HEALTH ASSESSMENT
BUREAU OF TOXIC SUBSTANCE ASSESSMENT

INDOOR AIR QUALITY QUESTIONNAIRE AND BUILDING INVENTORY

This form must be completed for each residence involved in indoor air testing.

Preparer's Name Maria Stepanova Date Prepared 3/18/2010

(updated from previous inventory-6/08)

Preparer's Affiliation AECOM Phone No. 845-206-8765

1. **OCCUPANT**

Name:

Address:

County:

Home Phone No. Office Phone No.

2. **OWNER OR LANDLORD:**
(If different than occupant)

Name: Phil Miller

Address: 400 Main Street

Peekskill, NY

Phone No.

A. Building Construction Characteristics

Type (circle appropriate responses): Single Family Multiple Dwelling (Commercial) Public School Abandoned

Ranch	2-Family
Raised Ranch	Duplex
Split Level	Apartment House Units
Colonial	Number of floors 2
Mobile Home	Other specify

Residence Age NA General Description of Building Construction Materials Concrete

Is the building insulated? Yes/(No) How air tight is the building? Not tight.

OSR-3 (continued)

B. Basement construction characteristics (circle all that apply):

1. Full basement, crawlspace, slab on grade, other
2. Basement floor: concrete, dirt, other
3. Basement floor: uncovered, covered, with partial concrete/partial tiles
4. Concrete floor: unsealed, sealed; with _____
5. Foundation walls: poured concrete, block, laid up stone, other brick
6. The basement is: wet, damp, dry Dry Sump present? y/n N Water in sump? y/n NA
7. The basement is: finished, unfinished Partially Finished.
8. Identify potential soil vapor entry points (e.g., cracks, utility ports, etc.)
   Sewer injection pit.
9. Describe how air tight the basement is _____

C. HVAC (circle all that apply):

1. The type of heating system(s) used in this residence is/are:

Hot Air Circulation	Heat Pump
Hot Water Radiation	Unvented Kerosene Heater
Steam Radiation	Wood stove
Electric Baseboard	Other (specify) Natural gas heat ceiling unit.

2. The type(s) of fuel(s) used is/are: Natural Gas, Fuel Oil, Electric, Wood, Coal Solar
   Other (specify)_____
3. Is the heating system's power plant located in the basement or another area: SW corner of bldg.
4. Is there air-conditioning? Yes / No Central Air or Window Units? _____
   Specify the location _____
5. Are there air distribution ducts present? Yes / No
6. Describe the supply and cold air return duct work in the basement including whether there is a cold air return, the tightness of duct joints

D. Potential Indoor Sources of Pollution

1. Has the house ever had a fire? Yes / (No) _____
2. Is there an attached garage? (Yes) / No
3. Is a vehicle normally parked in the garage? Yes / (No)
4. Is there smoking in the building? Yes / (No)
5. Is there a kerosene heater present? Yes / (No)
6. Is there a workshop, hobby or craft area in the residence? Yes / (No)
7. Have cleaning products been used recently? Yes / (No) When & Type? _____
8. Have cosmetic products been used recently? Yes / (No) When & Type? _____
9. Has painting/staining been done in the last 6 months? Yes / No Where & When? unknown
10. Is there new carpet, drapes or other textiles? Yes / (No) Where & When? _____
11. Have air fresheners been used recently? Yes / (No) Where & When? _____
12. Is there a bathroom exhaust fan? Yes / (No) Where is it vented? _____
13. Is there a clothes dryer? Yes / (No) If yes, is it vented outside? Yes/No
14. Has there been a pesticide application? Yes / (No) Where & Type? _____

15. An inventory of all products used or stored in the home should be performed. Any products that contain volatile organic compounds or chemicals similar to the target compounds should be listed. The attached product inventory form should be used for this purpose.

16. Is there a kitchen exhaust fan? Yes / (No) Where is it vented? _____
17. Are there odors in the building? Yes / (No) If yes, describe _____
18. Do any of the building occupants use solvents at work? Yes/(No)
    If yes, what types of solvents are used? _____
    If yes, are their clothes washed at work? Y/N
19. Do any of the building occupants use or regularly work at a dry-cleaning service (circle response)?
    Yes, use dry-cleaning regularly (weekly) No
    Yes, use dry-cleaning infrequently (monthly or less) (Unknown)
    Yes, work at a dry-cleaning service
20. Is there a radon mitigation system for the building/structure? Y/(N) Date of Installation: _____

E. **Water and Sewage (Circle the appropriate response)**

Source of Water

(Public Water) Drilled Well Driven Well Dug Well Other (Specify)_____

Water Well Specifications: NOT APPLICABLE (NA)

Well Diameter _____ Grouted or Ungrouted _____

Well Depth _____ Type of Storage Tank _____

Depth to Bedrock _____ Size of Storage Tank _____

Feet of Casing _____ Describe type(s) of Treatment _____

_____

Water Quality: NA

Taste and/or odor problems? y / n If so, describe _____

How long has the taste and/or odor been present _____

Sewage Disposal: (Public Sewer) Septic Tank Leach Field Other (Specify) _____

Distance from well to septic system_____ Type of septic tank additive _____

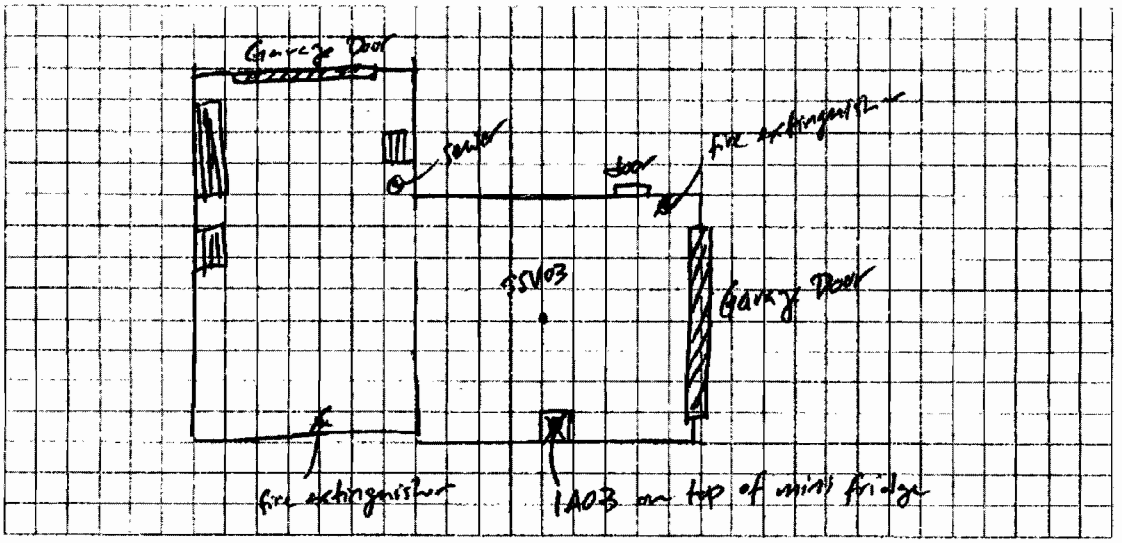
OSR-3 (continued)

F. Plan View

Draw a plan view sketch for each floor of the residence and if applicable, indicate air sampling locations, possible indoor air pollution sources and PID meter readings.

Basement: NONE

First Floor:

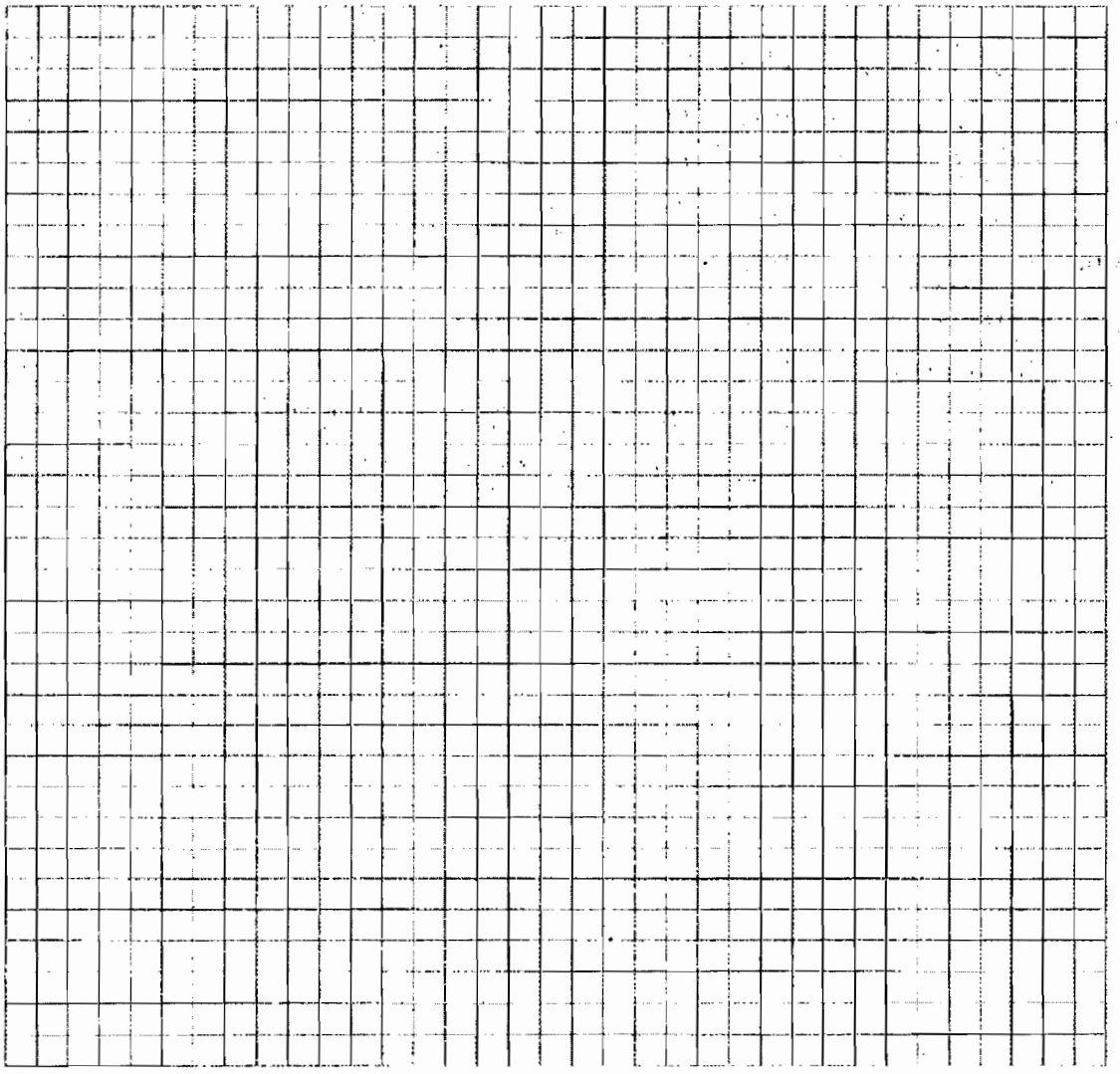


OSR-3 (continued)

G. Potential Outdoor Sources of Pollution

Draw a sketch of the area surrounding the residence being sampled. If applicable, provide information on the spill location (if known), potential air contamination sources (industries, gas stations, repair shops, landfills, etc.), outdoor air sampling location(s) and PID meter readings.

Also indicate compass direction, wind direction and speed during sampling, the locations of the well and septic system if applicable, and a qualifying statement to help locate the site on a topographical map.



Household Products Inventory

Occupant / residence 400 N. Water Street, Peekskill, NY

Investigator: Maria Stepanova Date: 3/19/2010

Location	Product Description (dispenser, size, manufacturer...)	Ingredients	Additional Comments
Basement West Room	Fire Extinguisher	Dry chemicals, mica, magnesium, aluminum	Good (full), Unopened
Basement West Room	Hoover Steam Vac/Carpet Detergent (64 oz)	Anionic and nonionic surfactant	Used
Basement West Room	Towel n/ Foam Expanding Sealant (12 oz)	MDI monomer, polyurethane resin, propane/isobutene	Used
Basement West Room	Auto Magic Dressing and Protectant (5 gal)	Synthetic isoparaffinic hydrocarbon, silicone fluid, mineral spirits, dye	Used (Empty)
Basement West Room	Armor All Protectant Wipes (17" x 9")		Used (Empty)
Basement East	Fire Extinguisher Ansul Sentry		

Note: Substantially the same as inventory from 6/28/2008.

Appendix D

2010 Meteorological Data

Table D-1
Meteological Data for March 18, 2010
Stewart International Airport
Newburgh, New York

Hourly Observations
Month/Year: 03/2010
Station Location: STEWART INTERNATIONAL AIRPORT (14714)
Latitude: 41.504
Longitude: -74.105
Elev: 0 feet above sea level

Date	Time	Temperature	Visibility	Dew Point	Relative Humidity	Wind Speed	Wind Direction	Station Pressure	Comments
Year_Month_Day	Military Time	Degrees Fahrenheit	Miles	Degrees Fahrenheit	%	Miles per hour		Inches Hg	
2010_3_18	0045	46.4	10	26.6	46	9.2	West	29.89	
2010_3_18	0145	42.8	10	26.6	53	6.9	West	29.88	
2010_3_18	0245	42.8	10	26.6	53	9.2	West	29.88	
2010_3_18	0345	41	10	26.6	57	6.9	West	29.87	
2010_3_18	0445	41	10	26.6	57	4.6	West	29.86	
2010_3_18	0545	41	10	26.6	57	6.9	WSW	29.86	
2010_3_18	0645	39.2	20	26.6	61	6.9	West	29.86	
2010_3_18	0745	39.2	20	26.6	61	6.9	West	29.87	
2010_3_18	0845	46.4	20	28.4	50	11.5	West	29.87	
2010_3_18	0945	51.8	20	32	47	15	West	29.87	
2010_3_18	[illegible]								
2010_3_18	[illegible]								
2010_3_18	[illegible]								
2010_3_18	[illegible]								
2010_3_18	1545	64.4	20	28.4	26	16.1	West	29.75	
2010_3_18	1645	66.2	20	23	19	20.7	WNW	29.74	
2010_3_18	1745	64.4	20	24.8	22	11.5	WNW	29.73	
2010_3_18	1845	62.6	20	24.8	24	11.5	NNW	29.74	
2010_3_18	1945	57.2	10	26.6	31	4.6	Variable	29.75	
2010_3_18	2045	53.6	10	26.6	35	4.6	Variable	29.77	
2010_3_18	2145	48.2	10	30.2	50	Calm	Calm	29.78	
2010_3_18	2245	46.4	10	30.2	53	Calm	Calm	29.97	
2010_3_18	2345	46.4	10	28.4	50	Calm	Calm	29.79	
	Statistics								
	MAX	**66.20**	**20.00**	**35.60**	**61.00**	**20.70**	-	**29.97**	
	MIN	**39.20**	**10.00**	**23.00**	**19.00**	**4.60**	-	**29.73**	
	AVG	**51.49**	**15.22**	**27.77**	**42.78**	**9.84**	-	**29.83**	

Notes:
Stewart International Airport is approximately 24 miles Northwest of site
Source: http://www.wunderground.com

Appendix E

2010 Data Usability Summary Report

AECOM Environment

Prepared for:
Consolidated Edison Company of New York
New York, New York

Prepared by:
AECOM
Westford, MA
May 4, 2010

March 2010 Indoor Air And Sub-Slab Vapor Sampling Data Usability Summary Report

Pemart Avenue Former MGP
Peekskill, New York

AECOM Environment

Prepared for:
Consolidated Edison Company of New York
New York, New York

Prepared by:
AECOM
Westford, MA
May 4, 2010

March 2010 Indoor Air And Sub-Slab Vapor Sampling Data Usability Summary Report

Pemart Avenue Former MGP Peekskill, New York

Prepared By:

Waverly Braunstein

Reviewed By:

Douglas E. Simmons, PG

1.0 Data Usability Summary Report

1.1 Summary

This Data Usability Summary Report (DUSR) includes a discussion of the usability of the data collected in the month of March, 2010 during the site investigation at the former MGP site located at Pemart Avenue, Peekskill, NY. A total of 11 air samples were collected and analyzed for a project specific list of volatile organic compounds (VOCs) using EPA Method TO-15.

The data were with reference to the *"USEPA Region II Validation Standard Operating Procedure for Validating Air Samples, Volatile Organic Analysis of Ambient Air in Canister by Method TO-15 (SOP# HW-31, Revision #4),"* October, 2006, and Method TO-15. Laboratory control limits and/or method criteria were used as appropriate as the basis for data review actions. Data qualifiers which may have been applied were consistent with the Region 2 guidance and consisted of the following:

Qualifier	Definition
J	Estimated
U	Not detected
UJ	Not detected, estimated
JN	Tentative identification, estimated
R	Rejected

Elements reviewed in preparing the DUSR were consistent with those specified in the NYSDEC guidance (NYSDEC, 2001).

In general, the data were found to be valid, and may be considered usable for decision making purposes. No data were rejected.

Selected data points were qualified as estimated (J/UJ) due to QC nonconformances. All QC nonconformances are summarized below.

1.2 Holding Times

Holding times were met for all analyses. No data were qualified on this basis.

1.3 Quality Control

Quality control (QC) elements were reviewed for compliance with acceptance criteria.

Calibrations – Initial and continuing calibrations met acceptance criteria for all analyses. No data were qualified on this basis.

Blanks – Blanks associated with the samples included laboratory method blanks and canister blanks for those samples collected in individually certified canisters (IA-05, IA-06, IA-07, and DUP-01). No

target compounds were detected in any of these blanks. No data were qualified on the basis of blank contamination.

Surrogates – Surrogate recoveries were acceptable for all analyses. No data were qualified on this basis.

Internal Standards – All internal standards fell within acceptable retention time windows for all analyses and all internal standard recoveries were acceptable. No data were qualified on this basis.

Laboratory Duplicates – Laboratory duplicate analyses were performed at the required frequency and all acceptance criteria were met. No data were qualified on this basis.

Field Duplicates – Samples IA-07 and DUP-01 were collected as the field duplicate pair.

The results for detected compounds and their RPDs are tabulated below. Precision was deemed acceptable for all results since the RPD criteria were met.

Compound	MRL (ppbv)	IA-07 (ppbv)	DUP-1 (ppbv)	RPD
Propene	0.45	1.6	1.7	6
Dichlorodifluoromethane	0.16	0.47	0.45	4
Ethanol	4.1	92	81	13
Acetone	3.3	6.0	5.6	7
Trichlorofluoromethane	0.14	0.22	0.20	10
n-Hexane	0.22	0.61	0.67	9
Benzene	0.24	0.38	0.39	3
2,2,4-Trimethylpentane	0.17	0.18	0.24	29
Toluene	0.21	0.78	0.76	3
alpha-Pinene	0.14	0.67	0.67	0
d-Limonene	0.14	0.31	0.33	6
2-Methylbutane	0.26	2.9	2.7	7
2-Methylpentane	0.22	0.58	0.60	3
Isopropyl alcohol	0.63	2.6	2.5	4
Criteria: RPD≤ 50; if both the sample and duplicate are ≥5x SQL. The RPD criterion is doubled if both the sample and duplicate results are <5x SQL.				

Laboratory Control Samples – Laboratory control samples (LCSs) were associated with all analyses. The recoveries of the LCSs associated with all analyses met the acceptance criteria in all cases.

1.4 Detection Limits and Sample Results

The samples were analyzed at minor dilutions due to the requirement to pressurize the canisters prior to analysis. Sample results and sample quantitation limits were adjusted accordingly. The following additional dilution was performed due to the reasons listed.

Sample ID	Dilution Factor	Reason for Dilution
IA-06	100x	Ethanol exceeded the calibration range in the undiluted analysis.

1.5 Completeness of Deliverables

The data were reported as NYSDEC ASP Category B deliverables. No significant omissions or deficiencies were noted.

1.6 Conclusions

In general, the data are valid as reported and may be used for decision making purposes. No data were rejected or qualified.

Attachments

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **AECOM Environment**
Client Sample ID: **IA_05**
Client Project ID: **Pemart Former MGP, Peekskill, NY / 60147-130-200**

CAS Project ID: P1001028
CAS Sample ID: P1001028-001

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9
Analyst: Wida Ang
Sampling Media: 6.0 L Summa Canister
Test Notes:
Container ID: AC01040

Date Collected: 3/18/10
Date Received: 3/23/10
Date Analyzed: 3/30/10
Volume(s) Analyzed: 1.00 Liter(s)

Initial Pressure (psig): -2.4 Final Pressure (psig): 3.5

Canister Dilution Factor: 1.48

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
115-07-1	Propene	**1.5**	0.74	**0.87**	0.43	
75-71-8	Dichlorodifluoromethane (CFC 12)	**2.4**	0.74	**0.48**	0.15	
74-87-3	Chloromethane	ND	0.74	ND	0.36	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	0.74	ND	0.11	
75-01-4	Vinyl Chloride	ND	0.74	ND	0.29	
106-99-0	1,3-Butadiene	ND	0.74	ND	0.33	
74-83-9	Bromomethane	ND	0.74	ND	0.19	
75-00-3	Chloroethane	ND	0.74	ND	0.28	
64-17-5	Ethanol	**43**	7.4	**23**	3.9	
75-05-8	Acetonitrile	ND	0.74	ND	0.44	
107-02-8	Acrolein	ND	3.0	ND	1.3	
67-64-1	Acetone	**18**	7.4	**7.5**	3.1	
75-69-4	Trichlorofluoromethane	**1.1**	0.74	**0.20**	0.13	
67-63-0	2-Propanol (Isopropyl Alcohol)	ND	1.5	ND	0.60	
107-13-1	Acrylonitrile	ND	0.74	ND	0.34	
75-35-4	1,1-Dichloroethene	ND	0.74	ND	0.19	
75-09-2	Methylene Chloride	ND	0.74	ND	0.21	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	0.74	ND	0.24	
76-13-1	Trichlorotrifluoroethane	ND	0.74	ND	0.097	
75-15-0	Carbon Disulfide	ND	7.4	ND	2.4	
156-60-5	trans-1,2-Dichloroethene	ND	0.74	ND	0.19	
75-34-3	1,1-Dichloroethane	ND	0.74	ND	0.18	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By:_____ Date:_____

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **AECOM Environment**
Client Sample ID: **IA_05** CAS Project ID: P1001028
Client Project ID: **Pemart Former MGP, Peekskill, NY / 60147-130-200** CAS Sample ID: P1001028-001

Test Code: EPA TO-15 Date Collected: 3/18/10
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Date Received: 3/23/10
Analyst: Wida Ang Date Analyzed: 3/30/10
Sampling Media: 6.0 L Summa Canister Volume(s) Analyzed: 1.00 Liter(s)
Test Notes:
Container ID: AC01040

Initial Pressure (psig): -2.4 Final Pressure (psig): 3.5

Canister Dilution Factor: 1.48

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
1634-04-4	Methyl tert-Butyl Ether	ND	0.74	ND	0.21	
108-05-4	Vinyl Acetate	ND	7.4	ND	2.1	
78-93-3	2-Butanone (MEK)	ND	7.4	ND	2.5	
156-59-2	cis-1,2-Dichloroethene	**1.4**	0.74	**0.35**	0.19	
141-78-6	Ethyl Acetate	ND	1.5	ND	0.41	
110-54-3	n-Hexane	**2.1**	0.74	**0.60**	0.21	
67-66-3	Chloroform	ND	0.74	ND	0.15	
109-99-9	Tetrahydrofuran (THF)	ND	0.74	ND	0.25	
107-06-2	1,2-Dichloroethane	ND	0.74	ND	0.18	
71-55-6	1,1,1-Trichloroethane	ND	0.74	ND	0.14	
71-43-2	Benzene	**1.5**	0.74	**0.48**	0.23	
56-23-5	Carbon Tetrachloride	ND	0.74	ND	0.12	
110-82-7	Cyclohexane	**6.2**	1.5	**1.8**	0.43	
78-87-5	1,2-Dichloropropane	ND	0.74	ND	0.16	
75-27-4	Bromodichloromethane	ND	0.74	ND	0.11	
79-01-6	Trichloroethene	**1.0**	0.74	**0.19**	0.14	
123-91-1	1,4-Dioxane	ND	0.74	ND	0.21	
540-84-1	2,2,4-Trimethylpentane (Isooctane)	**1.0**	0.74	**0.22**	0.16	
80-62-6	Methyl Methacrylate	ND	1.5	ND	0.36	
142-82-5	n-Heptane	**1.4**	0.74	**0.33**	0.18	
10061-01-5	cis-1,3-Dichloropropene	ND	0.74	ND	0.16	
108-10-1	4-Methyl-2-pentanone	ND	0.74	ND	0.18	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By:_____ Date:_____

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **AECOM Environment** CAS Project ID: P1001028
Client Sample ID: **IA_05** CAS Sample ID: P1001028-001
Client Project ID: **Pemart Former MGP, Peekskill, NY / 60147-130-200**

Test Code: EPA TO-15 Date Collected: 3/18/10
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Date Received: 3/23/10
Analyst: Wida Ang Date Analyzed: 3/30/10
Sampling Media: 6.0 L Summa Canister Volume(s) Analyzed: 1.00 Liter(s)
Test Notes:
Container ID: AC01040

Initial Pressure (psig): -2.4 Final Pressure (psig): 3.5

Canister Dilution Factor: 1.48

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
10061-02-6	trans-1,3-Dichloropropene	ND	0.74	ND	0.16	
79-00-5	1,1,2-Trichloroethane	ND	0.74	ND	0.14	
108-88-3	Toluene	**6.3**	0.74	**1.7**	0.20	
591-78-6	2-Hexanone	ND	0.74	ND	0.18	
124-48-1	Dibromochloromethane	ND	0.74	ND	0.087	
106-93-4	1,2-Dibromoethane	ND	0.74	ND	0.096	
123-86-4	n-Butyl Acetate	ND	0.74	ND	0.16	
111-65-9	n-Octane	ND	0.74	ND	0.16	
127-18-4	Tetrachloroethene	ND	0.74	ND	0.11	
108-90-7	Chlorobenzene	ND	0.74	ND	0.16	
100-41-4	Ethylbenzene	ND	0.74	ND	0.17	
179601-23-1	m,p-Xylenes	**1.7**	1.5	**0.39**	0.34	
75-25-2	Bromoform	ND	0.74	ND	0.072	
100-42-5	Styrene	ND	0.74	ND	0.17	
95-47-6	o-Xylene	ND	0.74	ND	0.17	
111-84-2	n-Nonane	ND	0.74	ND	0.14	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.74	ND	0.11	
98-82-8	Cumene	ND	0.74	ND	0.15	
80-56-8	alpha-Pinene	**1.0**	0.74	**0.19**	0.13	
103-65-1	n-Propylbenzene	ND	0.74	ND	0.15	
622-96-8	4-Ethyltoluene	ND	0.74	ND	0.15	
108-67-8	1,3,5-Trimethylbenzene	ND	0.74	ND	0.15	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By:_____ Date:_____

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: AECOM Environment
Client Sample ID: **IA_05**
Client Project ID: **Pemart Former MGP, Peekskill, NY / 60147-130-200**

CAS Project ID: P1001028
CAS Sample ID: P1001028-001

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9
Analyst: Wida Ang
Sampling Media: 6.0 L Summa Canister
Test Notes:
Container ID: AC01040

Date Collected: 3/18/10
Date Received: 3/23/10
Date Analyzed: 3/30/10
Volume(s) Analyzed: 1.00 Liter(s)

Initial Pressure (psig): **-2.40** Final Pressure (psig): **3.50**

Canister Dilution Factor: 1.48

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
95-63-6	1,2,4-Trimethylbenzene	ND	0.74	ND	0.15	
100-44-7	Benzyl Chloride	ND	0.74	ND	0.14	
541-73-1	1,3-Dichlorobenzene	ND	0.74	ND	0.12	
106-46-7	1,4-Dichlorobenzene	ND	0.74	ND	0.12	
526-73-8	1,2,3-Trimethylbenzene	ND	0.74	ND	0.15	
95-50-1	1,2-Dichlorobenzene	ND	0.74	ND	0.12	
5989-27-5	d-Limonene	**9.0**	0.74	**1.6**	0.13	
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.74	ND	0.077	
120-82-1	1,2,4-Trichlorobenzene	ND	0.74	ND	0.10	
91-20-3	Naphthalene	ND	0.74	ND	0.14	
87-68-3	Hexachlorobutadiene	ND	0.74	ND	0.069	
78-78-4	2-Methylbutane	**7.5**	0.74	**2.5**	0.25	
79-20-9	Methyl Acetate	ND	0.74	ND	0.24	
107-83-5	2-Methylpentane	**2.1**	0.74	**0.59**	0.21	
110-02-1	Thiophene	ND	0.74	ND	0.22	
565-59-3	2,3-Dimethylpentane	ND	0.74	ND	0.18	
108-87-2	Methylcyclohexane	**0.98**	0.74	**0.24**	0.18	
496-11-7	Indan	ND	0.74	ND	0.15	
95-13-6	Indene	ND	0.74	ND	0.16	
95-93-2	1,2,4,5-Tetramethylbenzene	ND	0.74	ND	0.13	
488-23-3	1,2,3,4-Tetramethylbenzene	ND	0.74	ND	0.13	
527-53-7	1,2,3,5-Tetramethylbenzene	ND	0.74	ND	0.13	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By:_____ Date:_____

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **AECOM Environment**
Client Sample ID: **CS_01** CAS Project ID: P1001028
Client Project ID: **Pemart Former MGP, Peekskill, NY / 60147-130-200** CAS Sample ID: P1001028-002

Test Code: EPA TO-15 Date Collected: 3/18/10
nstrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Date Received: 3/23/10
Analyst: Wida Ang Date Analyzed: 3/30/10
Sampling Media: 6.0 L Summa Canister Volume(s) Analyzed: 1.00 Liter(s)
Test Notes:
Container ID: SC00558

Initial Pressure (psig): -2.2 Final Pressure (psig): 3.5

Canister Dilution Factor: 1.46

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
115-07-1	Propene	**1.2**	0.73	**0.68**	0.42	
75-71-8	Dichlorodifluoromethane (CFC 12)	**2.3**	0.73	**0.47**	0.15	
74-87-3	Chloromethane	ND	0.73	ND	0.35	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	0.73	ND	0.10	
75-01-4	Vinyl Chloride	ND	0.73	ND	0.29	
106-99-0	1,3-Butadiene	ND	0.73	ND	0.33	
74-83-9	Bromomethane	ND	0.73	ND	0.19	
75-00-3	Chloroethane	ND	0.73	ND	0.28	
64-17-5	Ethanol	**28**	7.3	**15**	3.9	
75-05-8	Acetonitrile	ND	0.73	ND	0.43	
107-02-8	Acrolein	ND	2.9	ND	1.3	
67-64-1	Acetone	ND	7.3	ND	3.1	
75-69-4	Trichlorofluoromethane	**1.1**	0.73	**0.20**	0.13	
67-63-0	2-Propanol (Isopropyl Alcohol)	ND	1.5	ND	0.59	
107-13-1	Acrylonitrile	ND	0.73	ND	0.34	
75-35-4	1,1-Dichloroethene	ND	0.73	ND	0.18	
75-09-2	Methylene Chloride	ND	0.73	ND	0.21	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	0.73	ND	0.23	
76-13-1	Trichlorotrifluoroethane	ND	0.73	ND	0.095	
75-15-0	Carbon Disulfide	ND	7.3	ND	2.3	
156-60-5	trans-1,2-Dichloroethene	ND	0.73	ND	0.18	
75-34-3	1,1-Dichloroethane	ND	0.73	ND	0.18	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By:_____ Date:_____

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **AECOM Environment**
Client Sample ID: **CS_01** CAS Project ID: P1001028
Client Project ID: **Pemart Former MGP, Peekskill, NY / 60147-130-200** CAS Sample ID: P1001028-002

Test Code: EPA TO-15 Date Collected: 3/18/10
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Date Received: 3/23/10
Analyst: Wida Ang Date Analyzed: 3/30/10
Sampling Media: 6.0 L Summa Canister Volume(s) Analyzed: 1.00 Liter(s)
Test Notes:
Container ID: SC00558

Initial Pressure (psig): -2.2 Final Pressure (psig): 3.5

Canister Dilution Factor: 1.46

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
1634-04-4	Methyl tert-Butyl Ether	ND	0.73	ND	0.20	
108-05-4	Vinyl Acetate	ND	7.3	ND	2.1	
78-93-3	2-Butanone (MEK)	ND	7.3	ND	2.5	
156-59-2	cis-1,2-Dichloroethene	**7.2**	0.73	**1.8**	0.18	
141-78-6	Ethyl Acetate	ND	1.5	ND	0.41	
110-54-3	n-Hexane	**3.4**	0.73	**0.95**	0.21	
67-66-3	Chloroform	ND	0.73	ND	0.15	
109-99-9	Tetrahydrofuran (THF)	ND	0.73	ND	0.25	
107-06-2	1,2-Dichloroethane	ND	0.73	ND	0.18	
71-55-6	1,1,1-Trichloroethane	ND	0.73	ND	0.13	
71-43-2	Benzene	**1.7**	0.73	**0.52**	0.23	
56-23-5	Carbon Tetrachloride	ND	0.73	ND	0.12	
110-82-7	Cyclohexane	**1.5**	1.5	**0.44**	0.42	
78-87-5	1,2-Dichloropropane	ND	0.73	ND	0.16	
75-27-4	Bromodichloromethane	ND	0.73	ND	0.11	
79-01-6	Trichloroethene	**3.0**	0.73	**0.55**	0.14	
123-91-1	1,4-Dioxane	ND	0.73	ND	0.20	
540-84-1	2,2,4-Trimethylpentane (Isooctane)	**1.2**	0.73	**0.26**	0.16	
80-62-6	Methyl Methacrylate	ND	1.5	ND	0.36	
142-82-5	n-Heptane	**0.84**	0.73	**0.20**	0.18	
10061-01-5	cis-1,3-Dichloropropene	ND	0.73	ND	0.16	
108-10-1	4-Methyl-2-pentanone	ND	0.73	ND	0.18	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By:_____ Date:_____

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **AECOM Environment** CAS Project ID: P1001028
Client Sample ID: **CS_01** CAS Sample ID: P1001028-002
Client Project ID: **Pemart Former MGP, Peekskill, NY / 60147-130-200**

Test Code: EPA TO-15 Date Collected: 3/18/10
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Date Received: 3/23/10
Analyst: Wida Ang Date Analyzed: 3/30/10
Sampling Media: 6.0 L Summa Canister Volume(s) Analyzed: 1.00 Liter(s)
Test Notes:
Container ID: SC00558

Initial Pressure (psig): -2.2 Final Pressure (psig): 3.5

Canister Dilution Factor: 1.46

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
10061-02-6	trans-1,3-Dichloropropene	ND	0.73	ND	0.16	
79-00-5	1,1,2-Trichloroethane	ND	0.73	ND	0.13	
108-88-3	Toluene	**3.6**	0.73	**0.95**	0.19	
591-78-6	2-Hexanone	ND	0.73	ND	0.18	
124-48-1	Dibromochloromethane	ND	0.73	ND	0.086	
106-93-4	1,2-Dibromoethane	ND	0.73	ND	0.095	
123-86-4	n-Butyl Acetate	ND	0.73	ND	0.15	
111-65-9	n-Octane	ND	0.73	ND	0.16	
127-18-4	Tetrachloroethene	ND	0.73	ND	0.11	
108-90-7	Chlorobenzene	ND	0.73	ND	0.16	
100-41-4	Ethylbenzene	ND	0.73	ND	0.17	
179601-23-1	m,p-Xylenes	ND	1.5	ND	0.34	
75-25-2	Bromoform	ND	0.73	ND	0.071	
100-42-5	Styrene	ND	0.73	ND	0.17	
95-47-6	o-Xylene	ND	0.73	ND	0.17	
111-84-2	n-Nonane	ND	0.73	ND	0.14	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.73	ND	0.11	
98-82-8	Cumene	ND	0.73	ND	0.15	
80-56-8	alpha-Pinene	ND	0.73	ND	0.13	
103-65-1	n-Propylbenzene	ND	0.73	ND	0.15	
622-96-8	4-Ethyltoluene	ND	0.73	ND	0.15	
108-67-8	1,3,5-Trimethylbenzene	ND	0.73	ND	0.15	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By:_____ Date:_____

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: AECOM Environment
Client Sample ID: **CS_01**
Client Project ID: **Pemart Former MGP, Peekskill, NY / 60147-130-200**

CAS Project ID: P1001028
CAS Sample ID: P1001028-002

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9
Analyst: Wida Ang
Sampling Media: 6.0 L Summa Canister
Test Notes:
Container ID: SC00558

Date Collected: 3/18/10
Date Received: 3/23/10
Date Analyzed: 3/30/10
Volume(s) Analyzed: 1.00 Liter(s)

Initial Pressure (psig): **-2.20** Final Pressure (psig): **3.50**

Canister Dilution Factor: 1.46

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
95-63-6	1,2,4-Trimethylbenzene	ND	0.73	ND	0.15	
100-44-7	Benzyl Chloride	ND	0.73	ND	0.14	
541-73-1	1,3-Dichlorobenzene	ND	0.73	ND	0.12	
106-46-7	1,4-Dichlorobenzene	ND	0.73	ND	0.12	
526-73-8	1,2,3-Trimethylbenzene	ND	0.73	ND	0.15	
95-50-1	1,2-Dichlorobenzene	ND	0.73	ND	0.12	
5989-27-5	d-Limonene	**0.97**	0.73	**0.17**	0.13	
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.73	ND	0.076	
120-82-1	1,2,4-Trichlorobenzene	ND	0.73	ND	0.098	
91-20-3	Naphthalene	ND	0.73	ND	0.14	
87-68-3	Hexachlorobutadiene	ND	0.73	ND	0.068	
78-78-4	2-Methylbutane	**8.3**	0.73	**2.8**	0.25	
79-20-9	Methyl Acetate	ND	0.73	ND	0.24	
107-83-5	2-Methylpentane	**2.8**	0.73	**0.81**	0.21	
110-02-1	Thiophene	ND	0.73	ND	0.21	
565-59-3	2,3-Dimethylpentane	ND	0.73	ND	0.18	
108-87-2	Methylcyclohexane	ND	0.73	ND	0.18	
496-11-7	Indan	ND	0.73	ND	0.15	
95-13-6	Indene	ND	0.73	ND	0.15	
95-93-2	1,2,4,5-Tetramethylbenzene	ND	0.73	ND	0.13	
488-23-3	1,2,3,4-Tetramethylbenzene	ND	0.73	ND	0.13	
527-53-7	1,2,3,5-Tetramethylbenzene	ND	0.73	ND	0.13	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By:_____ Date:_____

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **AECOM Environment**
Client Sample ID: **IA_07** CAS Project ID: P1001028
Client Project ID: **Pemart Former MGP, Peekskill, NY / 60147-130-200** CAS Sample ID: P1001028-003

Test Code: EPA TO-15 Date Collected: 3/18/10
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Date Received: 3/23/10
Analyst: Wida Ang Date Analyzed: 3/30/10
Sampling Media: 6.0 L Summa Canister Volume(s) Analyzed: 1.00 Liter(s)
Test Notes:
Container ID: AC00845

Initial Pressure (psig): -3.0 Final Pressure (psig): 3.5

Canister Dilution Factor: 1.56

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
115-07-1	Propene	**2.7**	0.78	**1.6**	0.45	
75-71-8	Dichlorodifluoromethane (CFC 12)	**2.3**	0.78	**0.47**	0.16	
74-87-3	Chloromethane	ND	0.78	ND	0.38	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	0.78	ND	0.11	
75-01-4	Vinyl Chloride	ND	0.78	ND	0.31	
106-99-0	1,3-Butadiene	ND	0.78	ND	0.35	
74-83-9	Bromomethane	ND	0.78	ND	0.20	
75-00-3	Chloroethane	ND	0.78	ND	0.30	
64-17-5	Ethanol	**170**	7.8	**92**	4.1	
75-05-8	Acetonitrile	ND	0.78	ND	0.46	
107-02-8	Acrolein	ND	3.1	ND	1.4	
67-64-1	Acetone	**14**	7.8	**6.0**	3.3	
75-69-4	Trichlorofluoromethane	**1.2**	0.78	**0.22**	0.14	
67-63-0	2-Propanol (Isopropyl Alcohol)	**6.3**	1.6	**2.6**	0.63	
107-13-1	Acrylonitrile	ND	0.78	ND	0.36	
75-35-4	1,1-Dichloroethene	ND	0.78	ND	0.20	
75-09-2	Methylene Chloride	ND	0.78	ND	0.22	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	0.78	ND	0.25	
76-13-1	Trichlorotrifluoroethane	ND	0.78	ND	0.10	
75-15-0	Carbon Disulfide	ND	7.8	ND	2.5	
156-60-5	trans-1,2-Dichloroethene	ND	0.78	ND	0.20	
75-34-3	1,1-Dichloroethane	ND	0.78	ND	0.19	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By:_____ Date:_____

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **AECOM Environment**
Client Sample ID: **IA_07** CAS Project ID: P1001028
Client Project ID: **Pemart Former MGP, Peekskill, NY / 60147-130-200** CAS Sample ID: P1001028-003

Test Code: EPA TO-15 Date Collected: 3/18/10
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Date Received: 3/23/10
Analyst: Wida Ang Date Analyzed: 3/30/10
Sampling Media: 6.0 L Summa Canister Volume(s) Analyzed: 1.00 Liter(s)
Test Notes:
Container ID: AC00845

Initial Pressure (psig): -3.0 Final Pressure (psig): 3.5

Canister Dilution Factor: 1.56

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
1634-04-4	Methyl tert-Butyl Ether	ND	0.78	ND	0.22	
108-05-4	Vinyl Acetate	ND	7.8	ND	2.2	
78-93-3	2-Butanone (MEK)	ND	7.8	ND	2.6	
156-59-2	cis-1,2-Dichloroethene	ND	0.78	ND	0.20	
141-78-6	Ethyl Acetate	ND	1.6	ND	0.43	
110-54-3	n-Hexane	**2.1**	0.78	**0.61**	0.22	
67-66-3	Chloroform	ND	0.78	ND	0.16	
109-99-9	Tetrahydrofuran (THF)	ND	0.78	ND	0.26	
107-06-2	1,2-Dichloroethane	ND	0.78	ND	0.19	
71-55-6	1,1,1-Trichloroethane	ND	0.78	ND	0.14	
71-43-2	Benzene	**1.2**	0.78	**0.38**	0.24	
56-23-5	Carbon Tetrachloride	ND	0.78	ND	0.12	
110-82-7	Cyclohexane	ND	1.6	ND	0.45	
78-87-5	1,2-Dichloropropane	ND	0.78	ND	0.17	
75-27-4	Bromodichloromethane	ND	0.78	ND	0.12	
79-01-6	Trichloroethene	ND	0.78	ND	0.15	
123-91-1	1,4-Dioxane	ND	0.78	ND	0.22	
540-84-1	2,2,4-Trimethylpentane (Isooctane)	**0.83**	0.78	**0.18**	0.17	
80-62-6	Methyl Methacrylate	ND	1.6	ND	0.38	
142-82-5	n-Heptane	ND	0.78	ND	0.19	
10061-01-5	cis-1,3-Dichloropropene	ND	0.78	ND	0.17	
108-10-1	4-Methyl-2-pentanone	ND	0.78	ND	0.19	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By:_____ Date:_____

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **AECOM Environment** CAS Project ID: P1001028
Client Sample ID: **IA_07** CAS Sample ID: P1001028-003
Client Project ID: **Pemart Former MGP, Peekskill, NY / 60147-130-200**

Test Code: EPA TO-15 Date Collected: 3/18/10
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Date Received: 3/23/10
Analyst: Wida Ang Date Analyzed: 3/30/10
Sampling Media: 6.0 L Summa Canister Volume(s) Analyzed: 1.00 Liter(s)
Test Notes:
Container ID: AC00845

Initial Pressure (psig): -3.0 Final Pressure (psig): 3.5

Canister Dilution Factor: 1.56

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
10061-02-6	trans-1,3-Dichloropropene	ND	0.78	ND	0.17	
79-00-5	1,1,2-Trichloroethane	ND	0.78	ND	0.14	
108-88-3	Toluene	**2.9**	0.78	**0.78**	0.21	
591-78-6	2-Hexanone	ND	0.78	ND	0.19	
124-48-1	Dibromochloromethane	ND	0.78	ND	0.092	
106-93-4	1,2-Dibromoethane	ND	0.78	ND	0.10	
123-86-4	n-Butyl Acetate	ND	0.78	ND	0.16	
111-65-9	n-Octane	ND	0.78	ND	0.17	
127-18-4	Tetrachloroethene	ND	0.78	ND	0.12	
108-90-7	Chlorobenzene	ND	0.78	ND	0.17	
100-41-4	Ethylbenzene	ND	0.78	ND	0.18	
179601-23-1	m,p-Xylenes	ND	1.6	ND	0.36	
75-25-2	Bromoform	ND	0.78	ND	0.075	
100-42-5	Styrene	ND	0.78	ND	0.18	
95-47-6	o-Xylene	ND	0.78	ND	0.18	
111-84-2	n-Nonane	ND	0.78	ND	0.15	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.78	ND	0.11	
98-82-8	Cumene	ND	0.78	ND	0.16	
80-56-8	alpha-Pinene	**3.8**	0.78	**0.67**	0.14	
103-65-1	n-Propylbenzene	ND	0.78	ND	0.16	
622-96-8	4-Ethyltoluene	ND	0.78	ND	0.16	
108-67-8	1,3,5-Trimethylbenzene	ND	0.78	ND	0.16	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By:_____ Date:_____

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: AECOM Environment
Client Sample ID: **IA_07**
Client Project ID: **Pemart Former MGP, Peekskill, NY / 60147-130-200**

CAS Project ID: P1001028
CAS Sample ID: P1001028-003

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9
Analyst: Wida Ang
Sampling Media: 6.0 L Summa Canister
Test Notes:
Container ID: AC00845

Date Collected: 3/18/10
Date Received: 3/23/10
Date Analyzed: 3/30/10
Volume(s) Analyzed: 1.00 Liter(s)

Initial Pressure (psig): **-3.00** Final Pressure (psig): **3.50**

Canister Dilution Factor: 1.56

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
95-63-6	1,2,4-Trimethylbenzene	ND	0.78	ND	0.16	
100-44-7	Benzyl Chloride	ND	0.78	ND	0.15	
541-73-1	1,3-Dichlorobenzene	ND	0.78	ND	0.13	
106-46-7	1,4-Dichlorobenzene	ND	0.78	ND	0.13	
526-73-8	1,2,3-Trimethylbenzene	ND	0.78	ND	0.16	
95-50-1	1,2-Dichlorobenzene	ND	0.78	ND	0.13	
5989-27-5	d-Limonene	**1.7**	0.78	**0.31**	0.14	
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.78	ND	0.081	
120-82-1	1,2,4-Trichlorobenzene	ND	0.78	ND	0.11	
91-20-3	Naphthalene	ND	0.78	ND	0.15	
87-68-3	Hexachlorobutadiene	ND	0.78	ND	0.073	
78-78-4	2-Methylbutane	**8.5**	0.78	**2.9**	0.26	
79-20-9	Methyl Acetate	ND	0.78	ND	0.26	
107-83-5	2-Methylpentane	**2.0**	0.78	**0.58**	0.22	
110-02-1	Thiophene	ND	0.78	ND	0.23	
565-59-3	2,3-Dimethylpentane	ND	0.78	ND	0.19	
108-87-2	Methylcyclohexane	ND	0.78	ND	0.19	
496-11-7	Indan	ND	0.78	ND	0.16	
95-13-6	Indene	ND	0.78	ND	0.16	
95-93-2	1,2,4,5-Tetramethylbenzene	ND	0.78	ND	0.14	
488-23-3	1,2,3,4-Tetramethylbenzene	ND	0.78	ND	0.14	
527-53-7	1,2,3,5-Tetramethylbenzene	ND	0.78	ND	0.14	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By:_____ Date:_____

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **AECOM Environment**
Client Sample ID: **DUP_1** CAS Project ID: P1001028
Client Project ID: **Pemart Former MGP, Peekskill, NY / 60147-130-200** CAS Sample ID: P1001028-004

Test Code: EPA TO-15 Date Collected: 3/18/10
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Date Received: 3/23/10
Analyst: Wida Ang Date Analyzed: 3/30/10
Sampling Media: 6.0 L Summa Canister Volume(s) Analyzed: 1.00 Liter(s)
Test Notes:
Container ID: AC00919

Initial Pressure (psig): -3.3 Final Pressure (psig): 3.5

Canister Dilution Factor: 1.60

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
115-07-1	Propene	**2.9**	0.80	**1.7**	0.47	
75-71-8	Dichlorodifluoromethane (CFC 12)	**2.2**	0.80	**0.45**	0.16	
74-87-3	Chloromethane	ND	0.80	ND	0.39	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	0.80	ND	0.11	
75-01-4	Vinyl Chloride	ND	0.80	ND	0.31	
106-99-0	1,3-Butadiene	ND	0.80	ND	0.36	
74-83-9	Bromomethane	ND	0.80	ND	0.21	
75-00-3	Chloroethane	ND	0.80	ND	0.30	
64-17-5	Ethanol	**150**	8.0	**81**	4.2	
75-05-8	Acetonitrile	ND	0.80	ND	0.48	
107-02-8	Acrolein	ND	3.2	ND	1.4	
67-64-1	Acetone	**13**	8.0	**5.6**	3.4	
75-69-4	Trichlorofluoromethane	**1.1**	0.80	**0.20**	0.14	
67-63-0	2-Propanol (Isopropyl Alcohol)	**6.2**	1.6	**2.5**	0.65	
107-13-1	Acrylonitrile	ND	0.80	ND	0.37	
75-35-4	1,1-Dichloroethene	ND	0.80	ND	0.20	
75-09-2	Methylene Chloride	ND	0.80	ND	0.23	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	0.80	ND	0.26	
76-13-1	Trichlorotrifluoroethane	ND	0.80	ND	0.10	
75-15-0	Carbon Disulfide	ND	8.0	ND	2.6	
156-60-5	trans-1,2-Dichloroethene	ND	0.80	ND	0.20	
75-34-3	1,1-Dichloroethane	ND	0.80	ND	0.20	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By:_____ Date:_____

Client: **AECOM Environment**
Client Sample ID: **DUP_1** CAS Project ID: P1001028
Client Project ID: **Pemart Former MGP, Peekskill, NY / 60147-130-200** CAS Sample ID: P1001028-004

Test Code: EPA TO-15 Date Collected: 3/18/10
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Date Received: 3/23/10
Analyst: Wida Ang Date Analyzed: 3/30/10
Sampling Media: 6.0 L Summa Canister Volume(s) Analyzed: 1.00 Liter(s)
Test Notes:
Container ID: AC00919

Initial Pressure (psig): -3.3 Final Pressure (psig): 3.5

Canister Dilution Factor: 1.60

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
1634-04-4	Methyl tert-Butyl Ether	ND	0.80	ND	0.22	
108-05-4	Vinyl Acetate	ND	8.0	ND	2.3	
78-93-3	2-Butanone (MEK)	ND	8.0	ND	2.7	
156-59-2	cis-1,2-Dichloroethene	ND	0.80	ND	0.20	
141-78-6	Ethyl Acetate	ND	1.6	ND	0.44	
110-54-3	n-Hexane	**2.4**	0.80	**0.67**	0.23	
67-66-3	Chloroform	ND	0.80	ND	0.16	
109-99-9	Tetrahydrofuran (THF)	ND	0.80	ND	0.27	
107-06-2	1,2-Dichloroethane	ND	0.80	ND	0.20	
71-55-6	1,1,1-Trichloroethane	ND	0.80	ND	0.15	
71-43-2	Benzene	**1.2**	0.80	**0.39**	0.25	
56-23-5	Carbon Tetrachloride	ND	0.80	ND	0.13	
110-82-7	Cyclohexane	ND	1.6	ND	0.47	
78-87-5	1,2-Dichloropropane	ND	0.80	ND	0.17	
75-27-4	Bromodichloromethane	ND	0.80	ND	0.12	
79-01-6	Trichloroethene	ND	0.80	ND	0.15	
123-91-1	1,4-Dioxane	ND	0.80	ND	0.22	
540-84-1	2,2,4-Trimethylpentane (Isooctane)	**1.1**	0.80	**0.24**	0.17	
80-62-6	Methyl Methacrylate	ND	1.6	ND	0.39	
142-82-5	n-Heptane	ND	0.80	ND	0.20	
10061-01-5	cis-1,3-Dichloropropene	ND	0.80	ND	0.18	
108-10-1	4-Methyl-2-pentanone	ND	0.80	ND	0.20	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By:_____ Date:_____

Client: **AECOM Environment** CAS Project ID: P1001028

Client Sample ID: **DUP_1** CAS Sample ID: P1001028-004

Client Project ID: **Pemart Former MGP, Peekskill, NY / 60147-130-200**

Test Code: EPA TO-15 Date Collected: 3/18/10

Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Date Received: 3/23/10

Analyst: Wida Ang Date Analyzed: 3/30/10

Sampling Media: 6.0 L Summa Canister Volume(s) Analyzed: 1.00 Liter(s)

Test Notes:

Container ID: AC00919

Initial Pressure (psig): -3.3 Final Pressure (psig): 3.5

Canister Dilution Factor: 1.60

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
10061-02-6	trans-1,3-Dichloropropene	ND	0.80	ND	0.18	
79-00-5	1,1,2-Trichloroethane	ND	0.80	ND	0.15	
108-88-3	Toluene	**2.9**	0.80	**0.76**	0.21	
591-78-6	2-Hexanone	ND	0.80	ND	0.20	
124-48-1	Dibromochloromethane	ND	0.80	ND	0.094	
106-93-4	1,2-Dibromoethane	ND	0.80	ND	0.10	
123-86-4	n-Butyl Acetate	ND	0.80	ND	0.17	
111-65-9	n-Octane	ND	0.80	ND	0.17	
127-18-4	Tetrachloroethene	ND	0.80	ND	0.12	
108-90-7	Chlorobenzene	ND	0.80	ND	0.17	
100-41-4	Ethylbenzene	ND	0.80	ND	0.18	
179601-23-1	m,p-Xylenes	ND	1.6	ND	0.37	
75-25-2	Bromoform	ND	0.80	ND	0.077	
100-42-5	Styrene	ND	0.80	ND	0.19	
95-47-6	o-Xylene	ND	0.80	ND	0.18	
111-84-2	n-Nonane	ND	0.80	ND	0.15	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.80	ND	0.12	
98-82-8	Cumene	ND	0.80	ND	0.16	
80-56-8	alpha-Pinene	**3.7**	0.80	**0.67**	0.14	
103-65-1	n-Propylbenzene	ND	0.80	ND	0.16	
622-96-8	4-Ethyltoluene	ND	0.80	ND	0.16	
108-67-8	1,3,5-Trimethylbenzene	ND	0.80	ND	0.16	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By:_____ Date:_____

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: AECOM Environment
Client Sample ID: **DUP_1**
Client Project ID: **Pemart Former MGP, Peekskill, NY / 60147-130-200**

CAS Project ID: P1001028
CAS Sample ID: P1001028-004

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9
Analyst: Wida Ang
Sampling Media: 6.0 L Summa Canister
Test Notes:
Container ID: AC00919

Date Collected: 3/18/10
Date Received: 3/23/10
Date Analyzed: 3/30/10
Volume(s) Analyzed: 1.00 Liter(s)

Initial Pressure (psig): **-3.30** Final Pressure (psig): **3.50**

Canister Dilution Factor: 1.60

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
95-63-6	1,2,4-Trimethylbenzene	ND	0.80	ND	0.16	
100-44-7	Benzyl Chloride	ND	0.80	ND	0.15	
541-73-1	1,3-Dichlorobenzene	ND	0.80	ND	0.13	
106-46-7	1,4-Dichlorobenzene	ND	0.80	ND	0.13	
526-73-8	1,2,3-Trimethylbenzene	ND	0.80	ND	0.16	
95-50-1	1,2-Dichlorobenzene	ND	0.80	ND	0.13	
5989-27-5	d-Limonene	**1.8**	0.80	**0.33**	0.14	
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.80	ND	0.083	
120-82-1	1,2,4-Trichlorobenzene	ND	0.80	ND	0.11	
91-20-3	Naphthalene	ND	0.80	ND	0.15	
87-68-3	Hexachlorobutadiene	ND	0.80	ND	0.075	
78-78-4	2-Methylbutane	**7.9**	0.80	**2.7**	0.27	
79-20-9	Methyl Acetate	ND	0.80	ND	0.26	
107-83-5	2-Methylpentane	**2.1**	0.80	**0.60**	0.23	
110-02-1	Thiophene	ND	0.80	ND	0.23	
565-59-3	2,3-Dimethylpentane	ND	0.80	ND	0.20	
108-87-2	Methylcyclohexane	ND	0.80	ND	0.20	
496-11-7	Indan	ND	0.80	ND	0.17	
95-13-6	Indene	ND	0.80	ND	0.17	
95-93-2	1,2,4,5-Tetramethylbenzene	ND	0.80	ND	0.15	
488-23-3	1,2,3,4-Tetramethylbenzene	ND	0.80	ND	0.15	
527-53-7	1,2,3,5-Tetramethylbenzene	ND	0.80	ND	0.15	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By:_____ Date:_____

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **AECOM Environment**
Client Sample ID: **IA_06** CAS Project ID: P1001028
Client Project ID: **Pemart Former MGP, Peekskill, NY / 60147-130-200** CAS Sample ID: P1001028-005

Test Code: EPA TO-15 Date Collected: 3/18/10
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Date Received: 3/23/10
Analyst: Wida Ang Date Analyzed: 3/30/10
Sampling Media: 6.0 L Summa Canister Volume(s) Analyzed: 1.00 Liter(s)
Test Notes: 0.10 Liter(s)
Container ID: AC00884

Initial Pressure (psig): -3.8 Final Pressure (psig): 3.6

Canister Dilution Factor: 1.68

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
115-07-1	Propene	**21**	0.84	**12**	0.49	
75-71-8	Dichlorodifluoromethane (CFC 12)	**2.7**	0.84	**0.54**	0.17	
74-87-3	Chloromethane	ND	0.84	ND	0.41	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	0.84	ND	0.12	
75-01-4	Vinyl Chloride	ND	0.84	ND	0.33	
106-99-0	1,3-Butadiene	ND	0.84	ND	0.38	
74-83-9	Bromomethane	ND	0.84	ND	0.22	
75-00-3	Chloroethane	ND	0.84	ND	0.32	
64-17-5	Ethanol	**1,300**	84	**690**	45	**D**
75-05-8	Acetonitrile	ND	0.84	ND	0.50	
107-02-8	Acrolein	ND	3.4	ND	1.5	
67-64-1	Acetone	**34**	8.4	**14**	3.5	
75-69-4	Trichlorofluoromethane	**1.7**	0.84	**0.29**	0.15	
67-63-0	2-Propanol (Isopropyl Alcohol)	**86**	1.7	**35**	0.68	
107-13-1	Acrylonitrile	ND	0.84	ND	0.39	
75-35-4	1,1-Dichloroethene	ND	0.84	ND	0.21	
75-09-2	Methylene Chloride	ND	0.84	ND	0.24	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	0.84	ND	0.27	
76-13-1	Trichlorotrifluoroethane	ND	0.84	ND	0.11	
75-15-0	Carbon Disulfide	ND	8.4	ND	2.7	
156-60-5	trans-1,2-Dichloroethene	ND	0.84	ND	0.21	
75-34-3	1,1-Dichloroethane	ND	0.84	ND	0.21	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.
D = The reported result is from a dilution.

Verified By:_____ Date:_____

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **AECOM Environment**
Client Sample ID: **IA_06** CAS Project ID: P1001028
Client Project ID: **Pemart Former MGP, Peekskill, NY / 60147-130-200** CAS Sample ID: P1001028-005

Test Code: EPA TO-15 Date Collected: 3/18/10
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Date Received: 3/23/10
Analyst: Wida Ang Date Analyzed: 3/30/10
Sampling Media: 6.0 L Summa Canister Volume(s) Analyzed: 1.00 Liter(s)
Test Notes: 0.10 Liter(s)
Container ID: AC00884

Initial Pressure (psig): -3.8 Final Pressure (psig): 3.6

Canister Dilution Factor: 1.68

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
1634-04-4	Methyl tert-Butyl Ether	ND	0.84	ND	0.23	
108-05-4	Vinyl Acetate	ND	8.4	ND	2.4	
78-93-3	2-Butanone (MEK)	ND	8.4	ND	2.8	
156-59-2	cis-1,2-Dichloroethene	ND	0.84	ND	0.21	
141-78-6	Ethyl Acetate	ND	1.7	ND	0.47	
110-54-3	n-Hexane	**3.9**	0.84	**1.1**	0.24	
67-66-3	Chloroform	ND	0.84	ND	0.17	
109-99-9	Tetrahydrofuran (THF)	ND	0.84	ND	0.28	
107-06-2	1,2-Dichloroethane	ND	0.84	ND	0.21	
71-55-6	1,1,1-Trichloroethane	ND	0.84	ND	0.15	
71-43-2	Benzene	**2.2**	0.84	**0.70**	0.26	
56-23-5	Carbon Tetrachloride	ND	0.84	ND	0.13	
110-82-7	Cyclohexane	**3.0**	1.7	**0.87**	0.49	
78-87-5	1,2-Dichloropropane	ND	0.84	ND	0.18	
75-27-4	Bromodichloromethane	ND	0.84	ND	0.13	
79-01-6	Trichloroethene	ND	0.84	ND	0.16	
123-91-1	1,4-Dioxane	ND	0.84	ND	0.23	
540-84-1	2,2,4-Trimethylpentane (Isooctane)	**1.7**	0.84	**0.36**	0.18	
80-62-6	Methyl Methacrylate	ND	1.7	ND	0.41	
142-82-5	n-Heptane	**1.8**	0.84	**0.45**	0.21	
10061-01-5	cis-1,3-Dichloropropene	ND	0.84	ND	0.19	
108-10-1	4-Methyl-2-pentanone	ND	0.84	ND	0.21	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By:_____ Date:_____

Client: **AECOM Environment** CAS Project ID: P1001028

Client Sample ID: **IA_06** CAS Sample ID: P1001028-005

Client Project ID: **Pemart Former MGP, Peekskill, NY / 60147-130-200**

Test Code: EPA TO-15 Date Collected: 3/18/10

nstrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Date Received: 3/23/10

Analyst: Wida Ang Date Analyzed: 3/30/10

Sampling Media: 6.0 L Summa Canister Volume(s) Analyzed: 1.00 Liter(s)

Test Notes: 0.10 Liter(s)

Container ID: AC00884

Initial Pressure (psig): -3.8 Final Pressure (psig): 3.6

Canister Dilution Factor: 1.68

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
10061-02-6	trans-1,3-Dichloropropene	ND	0.84	ND	0.19	
79-00-5	1,1,2-Trichloroethane	ND	0.84	ND	0.15	
108-88-3	Toluene	**7.1**	0.84	**1.9**	0.22	
591-78-6	2-Hexanone	ND	0.84	ND	0.21	
124-48-1	Dibromochloromethane	ND	0.84	ND	0.099	
106-93-4	1,2-Dibromoethane	ND	0.84	ND	0.11	
123-86-4	n-Butyl Acetate	**0.93**	0.84	**0.20**	0.18	
111-65-9	n-Octane	ND	0.84	ND	0.18	
127-18-4	Tetrachloroethene	ND	0.84	ND	0.12	
108-90-7	Chlorobenzene	ND	0.84	ND	0.18	
100-41-4	Ethylbenzene	ND	0.84	ND	0.19	
179601-23-1	m,p-Xylenes	**2.2**	1.7	**0.51**	0.39	
75-25-2	Bromoform	ND	0.84	ND	0.081	
100-42-5	Styrene	ND	0.84	ND	0.20	
95-47-6	o-Xylene	ND	0.84	ND	0.19	
111-84-2	n-Nonane	ND	0.84	ND	0.16	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.84	ND	0.12	
98-82-8	Cumene	ND	0.84	ND	0.17	
80-56-8	alpha-Pinene	**9.9**	0.84	**1.8**	0.15	
103-65-1	n-Propylbenzene	ND	0.84	ND	0.17	
622-96-8	4-Ethyltoluene	ND	0.84	ND	0.17	
108-67-8	1,3,5-Trimethylbenzene	ND	0.84	ND	0.17	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By:_____ Date:_____

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: AECOM Environment
Client Sample ID: **IA_06**
Client Project ID: **Pemart Former MGP, Peekskill, NY / 60147-130-200**

CAS Project ID: P1001028
CAS Sample ID: P1001028-005

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9
Analyst: Wida Ang
Sampling Media: 6.0 L Summa Canister
Test Notes:
Container ID: AC00884

Date Collected: 3/18/10
Date Received: 3/23/10
Date Analyzed: 3/30/10
Volume(s) Analyzed: 1.00 Liter(s)
0.10 Liter(s)

Initial Pressure (psig): **-3.80** Final Pressure (psig): **3.60**

Canister Dilution Factor: 1.68

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
95-63-6	1,2,4-Trimethylbenzene	ND	0.84	ND	0.17	
100-44-7	Benzyl Chloride	ND	0.84	ND	0.16	
541-73-1	1,3-Dichlorobenzene	ND	0.84	ND	0.14	
106-46-7	1,4-Dichlorobenzene	ND	0.84	ND	0.14	
526-73-8	1,2,3-Trimethylbenzene	ND	0.84	ND	0.17	
95-50-1	1,2-Dichlorobenzene	ND	0.84	ND	0.14	
5989-27-5	d-Limonene	**5.8**	0.84	**1.0**	0.15	
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.84	ND	0.087	
120-82-1	1,2,4-Trichlorobenzene	ND	0.84	ND	0.11	
91-20-3	Naphthalene	**1.1**	0.84	**0.21**	0.16	
87-68-3	Hexachlorobutadiene	ND	0.84	ND	0.079	
78-78-4	2-Methylbutane	**21**	0.84	**7.1**	0.28	
79-20-9	Methyl Acetate	ND	0.84	ND	0.28	
107-83-5	2-Methylpentane	**3.6**	0.84	**1.0**	0.24	
110-02-1	Thiophene	ND	0.84	ND	0.24	
565-59-3	2,3-Dimethylpentane	ND	0.84	ND	0.21	
108-87-2	Methylcyclohexane	**1.3**	0.84	**0.31**	0.21	
496-11-7	Indan	ND	0.84	ND	0.17	
95-13-6	Indene	ND	0.84	ND	0.18	
95-93-2	1,2,4,5-Tetramethylbenzene	ND	0.84	ND	0.15	
488-23-3	1,2,3,4-Tetramethylbenzene	ND	0.84	ND	0.15	
527-53-7	1,2,3,5-Tetramethylbenzene	ND	0.84	ND	0.15	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By:_____ Date:_____

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **AECOM Environment**
Client Sample ID: **IA_02** CAS Project ID: P1001028
Client Project ID: **Pemart Former MGP, Peekskill, NY / 60147-130-200** CAS Sample ID: P1001028-006

Test Code: EPA TO-15 Date Collected: 3/18/10
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Date Received: 3/23/10
Analyst: Wida Ang Date Analyzed: 3/30/10
Sampling Media: 6.0 L Summa Canister Volume(s) Analyzed: 1.00 Liter(s)
Test Notes:
Container ID: AC01097

Initial Pressure (psig): -1.9 Final Pressure (psig): 3.5

Canister Dilution Factor: 1.42

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
115-07-1	Propene	**1.6**	0.71	**0.93**	0.41	
75-71-8	Dichlorodifluoromethane (CFC 12)	**2.3**	0.71	**0.46**	0.14	
74-87-3	Chloromethane	ND	0.71	ND	0.34	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	0.71	ND	0.10	
75-01-4	Vinyl Chloride	ND	0.71	ND	0.28	
106-99-0	1,3-Butadiene	ND	0.71	ND	0.32	
74-83-9	Bromomethane	ND	0.71	ND	0.18	
75-00-3	Chloroethane	ND	0.71	ND	0.27	
64-17-5	Ethanol	**140**	7.1	**76**	3.8	
75-05-8	Acetonitrile	**0.85**	0.71	**0.51**	0.42	
107-02-8	Acrolein	ND	2.8	ND	1.2	
67-64-1	Acetone	**21**	7.1	**8.8**	3.0	
75-69-4	Trichlorofluoromethane	**1.7**	0.71	**0.31**	0.13	
67-63-0	2-Propanol (Isopropyl Alcohol)	**3.0**	1.4	**1.2**	0.58	
107-13-1	Acrylonitrile	ND	0.71	ND	0.33	
75-35-4	1,1-Dichloroethene	ND	0.71	ND	0.18	
75-09-2	Methylene Chloride	ND	0.71	ND	0.20	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	0.71	ND	0.23	
76-13-1	Trichlorotrifluoroethane	ND	0.71	ND	0.093	
75-15-0	Carbon Disulfide	ND	7.1	ND	2.3	
156-60-5	trans-1,2-Dichloroethene	ND	0.71	ND	0.18	
75-34-3	1,1-Dichloroethane	ND	0.71	ND	0.18	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By:_____ Date:_____

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **AECOM Environment**
Client Sample ID: **IA_02** CAS Project ID: P1001028
Client Project ID: **Pemart Former MGP, Peekskill, NY / 60147-130-200** CAS Sample ID: P1001028-006

Test Code: EPA TO-15 Date Collected: 3/18/10
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Date Received: 3/23/10
Analyst: Wida Ang Date Analyzed: 3/30/10
Sampling Media: 6.0 L Summa Canister Volume(s) Analyzed: 1.00 Liter(s)
Test Notes:
Container ID: AC01097

Initial Pressure (psig): -1.9 Final Pressure (psig): 3.5

Canister Dilution Factor: 1.42

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
1634-04-4	Methyl tert-Butyl Ether	ND	0.71	ND	0.20	
108-05-4	Vinyl Acetate	ND	7.1	ND	2.0	
78-93-3	2-Butanone (MEK)	ND	7.1	ND	2.4	
156-59-2	cis-1,2-Dichloroethene	ND	0.71	ND	0.18	
141-78-6	Ethyl Acetate	ND	1.4	ND	0.39	
110-54-3	n-Hexane	**2.2**	0.71	**0.63**	0.20	
67-66-3	Chloroform	**1.4**	0.71	**0.29**	0.15	
109-99-9	Tetrahydrofuran (THF)	ND	0.71	ND	0.24	
107-06-2	1,2-Dichloroethane	ND	0.71	ND	0.18	
71-55-6	1,1,1-Trichloroethane	ND	0.71	ND	0.13	
71-43-2	Benzene	**1.6**	0.71	**0.49**	0.22	
56-23-5	Carbon Tetrachloride	ND	0.71	ND	0.11	
110-82-7	Cyclohexane	ND	1.4	ND	0.41	
78-87-5	1,2-Dichloropropane	ND	0.71	ND	0.15	
75-27-4	Bromodichloromethane	ND	0.71	ND	0.11	
79-01-6	Trichloroethene	ND	0.71	ND	0.13	
123-91-1	1,4-Dioxane	ND	0.71	ND	0.20	
540-84-1	2,2,4-Trimethylpentane (Isooctane)	**1.2**	0.71	**0.26**	0.15	
80-62-6	Methyl Methacrylate	ND	1.4	ND	0.35	
142-82-5	n-Heptane	**1.2**	0.71	**0.30**	0.17	
10061-01-5	cis-1,3-Dichloropropene	ND	0.71	ND	0.16	
108-10-1	4-Methyl-2-pentanone	ND	0.71	ND	0.17	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By:_____ Date:_____

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **AECOM Environment** CAS Project ID: P1001028
Client Sample ID: **IA_02** CAS Sample ID: P1001028-006
Client Project ID: **Pemart Former MGP, Peekskill, NY / 60147-130-200**

Test Code: EPA TO-15 Date Collected: 3/18/10
nstrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Date Received: 3/23/10
Analyst: Wida Ang Date Analyzed: 3/30/10
Sampling Media: 6.0 L Summa Canister Volume(s) Analyzed: 1.00 Liter(s)
Test Notes:
Container ID: AC01097

Initial Pressure (psig): -1.9 Final Pressure (psig): 3.5

Canister Dilution Factor: 1.42

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
10061-02-6	trans-1,3-Dichloropropene	ND	0.71	ND	0.16	
79-00-5	1,1,2-Trichloroethane	ND	0.71	ND	0.13	
108-88-3	Toluene	**6.2**	0.71	**1.6**	0.19	
591-78-6	2-Hexanone	ND	0.71	ND	0.17	
124-48-1	Dibromochloromethane	ND	0.71	ND	0.083	
106-93-4	1,2-Dibromoethane	ND	0.71	ND	0.092	
123-86-4	n-Butyl Acetate	ND	0.71	ND	0.15	
111-65-9	n-Octane	ND	0.71	ND	0.15	
127-18-4	Tetrachloroethene	ND	0.71	ND	0.10	
108-90-7	Chlorobenzene	ND	0.71	ND	0.15	
100-41-4	Ethylbenzene	ND	0.71	ND	0.16	
179601-23-1	m,p-Xylenes	**2.3**	1.4	**0.54**	0.33	
75-25-2	Bromoform	ND	0.71	ND	0.069	
100-42-5	Styrene	ND	0.71	ND	0.17	
95-47-6	o-Xylene	**0.87**	0.71	**0.20**	0.16	
111-84-2	n-Nonane	**1.7**	0.71	**0.33**	0.14	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.71	ND	0.10	
98-82-8	Cumene	ND	0.71	ND	0.14	
80-56-8	alpha-Pinene	ND	0.71	ND	0.13	
103-65-1	n-Propylbenzene	ND	0.71	ND	0.14	
622-96-8	4-Ethyltoluene	ND	0.71	ND	0.14	
108-67-8	1,3,5-Trimethylbenzene	ND	0.71	ND	0.14	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By:_____ Date:_____

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: AECOM Environment
Client Sample ID: **IA_02** CAS Project ID: P1001028
Client Project ID: **Pemart Former MGP, Peekskill, NY / 60147-130-200** CAS Sample ID: P1001028-006

Test Code: EPA TO-15 Date Collected: 3/18/10
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Date Received: 3/23/10
Analyst: Wida Ang Date Analyzed: 3/30/10
Sampling Media: 6.0 L Summa Canister Volume(s) Analyzed: 1.00 Liter(s)
Test Notes:
Container ID: AC01097

Initial Pressure (psig): **-1.90** Final Pressure (psig): **3.50**

Canister Dilution Factor: 1.42

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
95-63-6	1,2,4-Trimethylbenzene	**1.4**	0.71	**0.28**	0.14	
100-44-7	Benzyl Chloride	ND	0.71	ND	0.14	
541-73-1	1,3-Dichlorobenzene	ND	0.71	ND	0.12	
106-46-7	1,4-Dichlorobenzene	ND	0.71	ND	0.12	
526-73-8	1,2,3-Trimethylbenzene	ND	0.71	ND	0.14	
95-50-1	1,2-Dichlorobenzene	ND	0.71	ND	0.12	
5989-27-5	d-Limonene	**1.0**	0.71	**0.19**	0.13	
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.71	ND	0.073	
120-82-1	1,2,4-Trichlorobenzene	ND	0.71	ND	0.096	
91-20-3	Naphthalene	**1.1**	0.71	**0.21**	0.14	
87-68-3	Hexachlorobutadiene	ND	0.71	ND	0.067	
78-78-4	2-Methylbutane	**6.7**	0.71	**2.3**	0.24	
79-20-9	Methyl Acetate	ND	0.71	ND	0.23	
107-83-5	2-Methylpentane	**2.1**	0.71	**0.60**	0.20	
110-02-1	Thiophene	ND	0.71	ND	0.21	
565-59-3	2,3-Dimethylpentane	ND	0.71	ND	0.17	
108-87-2	Methylcyclohexane	**0.85**	0.71	**0.21**	0.18	
496-11-7	Indan	ND	0.71	ND	0.15	
95-13-6	Indene	ND	0.71	ND	0.15	
95-93-2	1,2,4,5-Tetramethylbenzene	ND	0.71	ND	0.13	
488-23-3	1,2,3,4-Tetramethylbenzene	ND	0.71	ND	0.13	
527-53-7	1,2,3,5-Tetramethylbenzene	ND	0.71	ND	0.13	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By:_____ Date:_____

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **AECOM Environment**
Client Sample ID: **SSV_02** CAS Project ID: P1001028
Client Project ID: **Pemart Former MGP, Peekskill, NY / 60147-130-200** CAS Sample ID: P1001028-007

Test Code: EPA TO-15 Date Collected: 3/18/10
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Date Received: 3/23/10
Analyst: Wida Ang Date Analyzed: 3/30/10
Sampling Media: 6.0 L Summa Canister Volume(s) Analyzed: 1.00 Liter(s)
Test Notes:
Container ID: SC00840

Initial Pressure (psig): -1.9 Final Pressure (psig): 3.5

Canister Dilution Factor: 1.42

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
115-07-1	Propene	**2.2**	0.71	**1.3**	0.41	
75-71-8	Dichlorodifluoromethane (CFC 12)	**2.3**	0.71	**0.47**	0.14	
74-87-3	Chloromethane	ND	0.71	ND	0.34	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	0.71	ND	0.10	
75-01-4	Vinyl Chloride	ND	0.71	ND	0.28	
106-99-0	1,3-Butadiene	ND	0.71	ND	0.32	
74-83-9	Bromomethane	ND	0.71	ND	0.18	
75-00-3	Chloroethane	ND	0.71	ND	0.27	
64-17-5	Ethanol	**38**	7.1	**20**	3.8	
75-05-8	Acetonitrile	ND	0.71	ND	0.42	
107-02-8	Acrolein	ND	2.8	ND	1.2	
67-64-1	Acetone	**7.2**	7.1	**3.0**	3.0	
75-69-4	Trichlorofluoromethane	**1.4**	0.71	**0.24**	0.13	
67-63-0	2-Propanol (Isopropyl Alcohol)	ND	1.4	ND	0.58	
107-13-1	Acrylonitrile	ND	0.71	ND	0.33	
75-35-4	1,1-Dichloroethene	ND	0.71	ND	0.18	
75-09-2	Methylene Chloride	ND	0.71	ND	0.20	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	0.71	ND	0.23	
76-13-1	Trichlorotrifluoroethane	ND	0.71	ND	0.093	
75-15-0	Carbon Disulfide	ND	7.1	ND	2.3	
156-60-5	trans-1,2-Dichloroethene	ND	0.71	ND	0.18	
75-34-3	1,1-Dichloroethane	ND	0.71	ND	0.18	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By:_____ Date:_____

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **AECOM Environment**
Client Sample ID: **SSV_02** CAS Project ID: P1001028
Client Project ID: **Pemart Former MGP, Peekskill, NY / 60147-130-200** CAS Sample ID: P1001028-007

Test Code: EPA TO-15 Date Collected: 3/18/10
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Date Received: 3/23/10
Analyst: Wida Ang Date Analyzed: 3/30/10
Sampling Media: 6.0 L Summa Canister Volume(s) Analyzed: 1.00 Liter(s)
Test Notes:
Container ID: SC00840

Initial Pressure (psig): -1.9 Final Pressure (psig): 3.5

Canister Dilution Factor: 1.42

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
1634-04-4	Methyl tert-Butyl Ether	ND	0.71	ND	0.20	
108-05-4	Vinyl Acetate	ND	7.1	ND	2.0	
78-93-3	2-Butanone (MEK)	ND	7.1	ND	2.4	
156-59-2	cis-1,2-Dichloroethene	ND	0.71	ND	0.18	
141-78-6	Ethyl Acetate	**4.0**	1.4	**1.1**	0.39	
110-54-3	n-Hexane	**4.3**	0.71	**1.2**	0.20	
67-66-3	Chloroform	**1.1**	0.71	**0.22**	0.15	
109-99-9	Tetrahydrofuran (THF)	ND	0.71	ND	0.24	
107-06-2	1,2-Dichloroethane	ND	0.71	ND	0.18	
71-55-6	1,1,1-Trichloroethane	**50**	0.71	**9.1**	0.13	
71-43-2	Benzene	**11**	0.71	**3.3**	0.22	
56-23-5	Carbon Tetrachloride	ND	0.71	ND	0.11	
110-82-7	Cyclohexane	ND	1.4	ND	0.41	
78-87-5	1,2-Dichloropropane	ND	0.71	ND	0.15	
75-27-4	Bromodichloromethane	ND	0.71	ND	0.11	
79-01-6	Trichloroethene	**0.97**	0.71	**0.18**	0.13	
123-91-1	1,4-Dioxane	ND	0.71	ND	0.20	
540-84-1	2,2,4-Trimethylpentane (Isooctane)	**1.3**	0.71	**0.28**	0.15	
80-62-6	Methyl Methacrylate	ND	1.4	ND	0.35	
142-82-5	n-Heptane	**1.2**	0.71	**0.29**	0.17	
10061-01-5	cis-1,3-Dichloropropene	ND	0.71	ND	0.16	
108-10-1	4-Methyl-2-pentanone	ND	0.71	ND	0.17	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By:_____ Date:_____

Client: **AECOM Environment** CAS Project ID: P1001028

Client Sample ID: **SSV_02** CAS Sample ID: P1001028-007

Client Project ID: **Pemart Former MGP, Peekskill, NY / 60147-130-200**

Test Code: EPA TO-15 Date Collected: 3/18/10

Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Date Received: 3/23/10

Analyst: Wida Ang Date Analyzed: 3/30/10

Sampling Media: 6.0 L Summa Canister Volume(s) Analyzed: 1.00 Liter(s)

Test Notes:

Container ID: SC00840

Initial Pressure (psig): -1.9 Final Pressure (psig): 3.5

Canister Dilution Factor: 1.42

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
10061-02-6	trans-1,3-Dichloropropene	ND	0.71	ND	0.16	
79-00-5	1,1,2-Trichloroethane	ND	0.71	ND	0.13	
108-88-3	Toluene	**9.2**	0.71	**2.4**	0.19	
591-78-6	2-Hexanone	ND	0.71	ND	0.17	
124-48-1	Dibromochloromethane	ND	0.71	ND	0.083	
106-93-4	1,2-Dibromoethane	ND	0.71	ND	0.092	
123-86-4	n-Butyl Acetate	ND	0.71	ND	0.15	
111-65-9	n-Octane	ND	0.71	ND	0.15	
127-18-4	Tetrachloroethene	**14**	0.71	**2.1**	0.10	
108-90-7	Chlorobenzene	ND	0.71	ND	0.15	
100-41-4	Ethylbenzene	**0.80**	0.71	**0.18**	0.16	
179601-23-1	m,p-Xylenes	**2.7**	1.4	**0.63**	0.33	
75-25-2	Bromoform	ND	0.71	ND	0.069	
100-42-5	Styrene	**0.73**	0.71	**0.17**	0.17	
95-47-6	o-Xylene	**0.97**	0.71	**0.22**	0.16	
111-84-2	n-Nonane	ND	0.71	ND	0.14	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.71	ND	0.10	
98-82-8	Cumene	ND	0.71	ND	0.14	
80-56-8	alpha-Pinene	ND	0.71	ND	0.13	
103-65-1	n-Propylbenzene	ND	0.71	ND	0.14	
622-96-8	4-Ethyltoluene	ND	0.71	ND	0.14	
108-67-8	1,3,5-Trimethylbenzene	ND	0.71	ND	0.14	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By:_____ Date:_____

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: AECOM Environment
Client Sample ID: **SSV_02**
Client Project ID: **Pemart Former MGP, Peekskill, NY / 60147-130-200**

CAS Project ID: P1001028
CAS Sample ID: P1001028-007

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9
Analyst: Wida Ang
Sampling Media: 6.0 L Summa Canister
Test Notes:
Container ID: SC00840

Date Collected: 3/18/10
Date Received: 3/23/10
Date Analyzed: 3/30/10
Volume(s) Analyzed: 1.00 Liter(s)

Initial Pressure (psig): **-1.90** Final Pressure (psig): **3.50**

Canister Dilution Factor: 1.42

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
95-63-6	1,2,4-Trimethylbenzene	**1.6**	0.71	**0.33**	0.14	
100-44-7	Benzyl Chloride	ND	0.71	ND	0.14	
541-73-1	1,3-Dichlorobenzene	ND	0.71	ND	0.12	
106-46-7	1,4-Dichlorobenzene	ND	0.71	ND	0.12	
526-73-8	1,2,3-Trimethylbenzene	ND	0.71	ND	0.14	
95-50-1	1,2-Dichlorobenzene	ND	0.71	ND	0.12	
5989-27-5	d-Limonene	**7.8**	0.71	**1.4**	0.13	
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.71	ND	0.073	
120-82-1	1,2,4-Trichlorobenzene	ND	0.71	ND	0.096	
91-20-3	Naphthalene	ND	0.71	ND	0.14	
87-68-3	Hexachlorobutadiene	ND	0.71	ND	0.067	
78-78-4	2-Methylbutane	**10**	0.71	**3.5**	0.24	
79-20-9	Methyl Acetate	ND	0.71	ND	0.23	
107-83-5	2-Methylpentane	**3.9**	0.71	**1.1**	0.20	
110-02-1	Thiophene	ND	0.71	ND	0.21	
565-59-3	2,3-Dimethylpentane	ND	0.71	ND	0.17	
108-87-2	Methylcyclohexane	**0.91**	0.71	**0.23**	0.18	
496-11-7	Indan	ND	0.71	ND	0.15	
95-13-6	Indene	ND	0.71	ND	0.15	
95-93-2	1,2,4,5-Tetramethylbenzene	ND	0.71	ND	0.13	
488-23-3	1,2,3,4-Tetramethylbenzene	ND	0.71	ND	0.13	
527-53-7	1,2,3,5-Tetramethylbenzene	ND	0.71	ND	0.13	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By:_____ Date:_____

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **AECOM Environment**

Client Sample ID: **IA_01**

Client Project ID: **Pemart Former MGP, Peekskill, NY / 60147-130-200**

CAS Project ID: P1001028

CAS Sample ID: P1001028-008

Test Code: EPA TO-15

Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9

Analyst: Wida Ang

Sampling Media: 6.0 L Summa Canister

Test Notes:

Container ID: AC01351

Date Collected: 3/18/10

Date Received: 3/23/10

Date Analyzed: 3/30/10

Volume(s) Analyzed: 1.00 Liter(s)

Initial Pressure (psig): -2.5 Final Pressure (psig): 3.5

Canister Dilution Factor: 1.49

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
115-07-1	Propene	ND	0.75	ND	0.43	
75-71-8	Dichlorodifluoromethane (CFC 12)	**2.6**	0.75	**0.52**	0.15	
74-87-3	Chloromethane	ND	0.75	ND	0.36	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	0.75	ND	0.11	
75-01-4	Vinyl Chloride	ND	0.75	ND	0.29	
106-99-0	1,3-Butadiene	ND	0.75	ND	0.34	
74-83-9	Bromomethane	ND	0.75	ND	0.19	
75-00-3	Chloroethane	ND	0.75	ND	0.28	
64-17-5	Ethanol	**40**	7.5	**21**	4.0	
75-05-8	Acetonitrile	ND	0.75	ND	0.44	
107-02-8	Acrolein	ND	3.0	ND	1.3	
67-64-1	Acetone	**11**	7.5	**4.4**	3.1	
75-69-4	Trichlorofluoromethane	**1.2**	0.75	**0.21**	0.13	
67-63-0	2-Propanol (Isopropyl Alcohol)	ND	1.5	ND	0.61	
107-13-1	Acrylonitrile	ND	0.75	ND	0.34	
75-35-4	1,1-Dichloroethene	ND	0.75	ND	0.19	
75-09-2	Methylene Chloride	ND	0.75	ND	0.21	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	0.75	ND	0.24	
76-13-1	Trichlorotrifluoroethane	ND	0.75	ND	0.097	
75-15-0	Carbon Disulfide	ND	7.5	ND	2.4	
156-60-5	trans-1,2-Dichloroethene	ND	0.75	ND	0.19	
75-34-3	1,1-Dichloroethane	ND	0.75	ND	0.18	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By:_____ Date:_____

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **AECOM Environment**
Client Sample ID: **IA_01**
Client Project ID: **Pemart Former MGP, Peekskill, NY / 60147-130-200**

CAS Project ID: P1001028
CAS Sample ID: P1001028-008

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9
Analyst: Wida Ang
Sampling Media: 6.0 L Summa Canister
Test Notes:
Container ID: AC01351

Date Collected: 3/18/10
Date Received: 3/23/10
Date Analyzed: 3/30/10
Volume(s) Analyzed: 1.00 Liter(s)

Initial Pressure (psig): -2.5 Final Pressure (psig): 3.5

Canister Dilution Factor: 1.49

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
1634-04-4	Methyl tert-Butyl Ether	ND	0.75	ND	0.21	
108-05-4	Vinyl Acetate	ND	7.5	ND	2.1	
78-93-3	2-Butanone (MEK)	ND	7.5	ND	2.5	
156-59-2	cis-1,2-Dichloroethene	ND	0.75	ND	0.19	
141-78-6	Ethyl Acetate	ND	1.5	ND	0.41	
110-54-3	n-Hexane	**1.7**	0.75	**0.49**	0.21	
67-66-3	Chloroform	ND	0.75	ND	0.15	
109-99-9	Tetrahydrofuran (THF)	ND	0.75	ND	0.25	
107-06-2	1,2-Dichloroethane	ND	0.75	ND	0.18	
71-55-6	1,1,1-Trichloroethane	ND	0.75	ND	0.14	
71-43-2	Benzene	**0.88**	0.75	**0.27**	0.23	
56-23-5	Carbon Tetrachloride	ND	0.75	ND	0.12	
110-82-7	Cyclohexane	ND	1.5	ND	0.43	
78-87-5	1,2-Dichloropropane	ND	0.75	ND	0.16	
75-27-4	Bromodichloromethane	ND	0.75	ND	0.11	
79-01-6	Trichloroethene	ND	0.75	ND	0.14	
123-91-1	1,4-Dioxane	ND	0.75	ND	0.21	
540-84-1	2,2,4-Trimethylpentane (Isooctane)	ND	0.75	ND	0.16	
80-62-6	Methyl Methacrylate	ND	1.5	ND	0.36	
142-82-5	n-Heptane	ND	0.75	ND	0.18	
10061-01-5	cis-1,3-Dichloropropene	ND	0.75	ND	0.16	
108-10-1	4-Methyl-2-pentanone	ND	0.75	ND	0.18	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By:_____ Date:_____

Client: **AECOM Environment** CAS Project ID: P1001028

Client Sample ID: **IA_01** CAS Sample ID: P1001028-008

Client Project ID: **Pemart Former MGP, Peekskill, NY / 60147-130-200**

Test Code: EPA TO-15 Date Collected: 3/18/10

Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Date Received: 3/23/10

Analyst: Wida Ang Date Analyzed: 3/30/10

Sampling Media: 6.0 L Summa Canister Volume(s) Analyzed: 1.00 Liter(s)

Test Notes:

Container ID: AC01351

Initial Pressure (psig): -2.5 Final Pressure (psig): 3.5

Canister Dilution Factor: 1.49

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
10061-02-6	trans-1,3-Dichloropropene	ND	0.75	ND	0.16	
79-00-5	1,1,2-Trichloroethane	ND	0.75	ND	0.14	
108-88-3	Toluene	**2.3**	0.75	**0.62**	0.20	
591-78-6	2-Hexanone	ND	0.75	ND	0.18	
124-48-1	Dibromochloromethane	ND	0.75	ND	0.087	
106-93-4	1,2-Dibromoethane	ND	0.75	ND	0.097	
123-86-4	n-Butyl Acetate	ND	0.75	ND	0.16	
111-65-9	n-Octane	ND	0.75	ND	0.16	
127-18-4	Tetrachloroethene	ND	0.75	ND	0.11	
108-90-7	Chlorobenzene	ND	0.75	ND	0.16	
100-41-4	Ethylbenzene	ND	0.75	ND	0.17	
179601-23-1	m,p-Xylenes	ND	1.5	ND	0.34	
75-25-2	Bromoform	ND	0.75	ND	0.072	
100-42-5	Styrene	ND	0.75	ND	0.18	
95-47-6	o-Xylene	ND	0.75	ND	0.17	
111-84-2	n-Nonane	**0.78**	0.75	**0.15**	0.14	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.75	ND	0.11	
98-82-8	Cumene	ND	0.75	ND	0.15	
80-56-8	alpha-Pinene	ND	0.75	ND	0.13	
103-65-1	n-Propylbenzene	ND	0.75	ND	0.15	
622-96-8	4-Ethyltoluene	ND	0.75	ND	0.15	
108-67-8	1,3,5-Trimethylbenzene	ND	0.75	ND	0.15	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By:_____ Date:_____

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: AECOM Environment
Client Sample ID: **IA_01**
Client Project ID: **Pemart Former MGP, Peekskill, NY / 60147-130-200**

CAS Project ID: P1001028
CAS Sample ID: P1001028-008

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9
Analyst: Wida Ang
Sampling Media: 6.0 L Summa Canister
Test Notes:
Container ID: AC01351

Date Collected: 3/18/10
Date Received: 3/23/10
Date Analyzed: 3/30/10
Volume(s) Analyzed: 1.00 Liter(s)

Initial Pressure (psig): **-2.50** Final Pressure (psig): **3.50**

Canister Dilution Factor: 1.49

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
95-63-6	1,2,4-Trimethylbenzene	**0.97**	0.75	**0.20**	0.15	
100-44-7	Benzyl Chloride	ND	0.75	ND	0.14	
541-73-1	1,3-Dichlorobenzene	ND	0.75	ND	0.12	
106-46-7	1,4-Dichlorobenzene	ND	0.75	ND	0.12	
526-73-8	1,2,3-Trimethylbenzene	ND	0.75	ND	0.15	
95-50-1	1,2-Dichlorobenzene	ND	0.75	ND	0.12	
5989-27-5	d-Limonene	ND	0.75	ND	0.13	
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.75	ND	0.077	
120-82-1	1,2,4-Trichlorobenzene	ND	0.75	ND	0.10	
91-20-3	Naphthalene	**1.6**	0.75	**0.31**	0.14	
87-68-3	Hexachlorobutadiene	ND	0.75	ND	0.070	
78-78-4	2-Methylbutane	**4.1**	0.75	**1.4**	0.25	
79-20-9	Methyl Acetate	ND	0.75	ND	0.25	
107-83-5	2-Methylpentane	**1.4**	0.75	**0.41**	0.21	
110-02-1	Thiophene	ND	0.75	ND	0.22	
565-59-3	2,3-Dimethylpentane	ND	0.75	ND	0.18	
108-87-2	Methylcyclohexane	ND	0.75	ND	0.19	
496-11-7	Indan	ND	0.75	ND	0.15	
95-13-6	Indene	ND	0.75	ND	0.16	
95-93-2	1,2,4,5-Tetramethylbenzene	ND	0.75	ND	0.14	
488-23-3	1,2,3,4-Tetramethylbenzene	ND	0.75	ND	0.14	
527-53-7	1,2,3,5-Tetramethylbenzene	ND	0.75	ND	0.14	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By:_____ Date:_____

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **AECOM Environment**
Client Sample ID: **SSV_01**
Client Project ID: **Pemart Former MGP, Peekskill, NY / 60147-130-200**

CAS Project ID: P1001028
CAS Sample ID: P1001028-009

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9
Analyst: Wida Ang
Sampling Media: 6.0 L Summa Canister
Test Notes:
Container ID: SC01071

Date Collected: 3/18/10
Date Received: 3/23/10
Date Analyzed: 3/30/10
Volume(s) Analyzed: 0.030 Liter(s)

Initial Pressure (psig): -2.4 Final Pressure (psig): 3.9

Canister Dilution Factor: 1.51

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
115-07-1	Propene	ND	25	ND	15	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	25	ND	5.1	
74-87-3	Chloromethane	ND	25	ND	12	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	25	ND	3.6	
75-01-4	Vinyl Chloride	ND	25	ND	9.8	
106-99-0	1,3-Butadiene	ND	25	ND	11	
74-83-9	Bromomethane	ND	25	ND	6.5	
75-00-3	Chloroethane	ND	25	ND	9.5	
64-17-5	Ethanol	ND	250	ND	130	
75-05-8	Acetonitrile	ND	25	ND	15	
107-02-8	Acrolein	ND	100	ND	44	
67-64-1	Acetone	ND	250	ND	110	
75-69-4	Trichlorofluoromethane	ND	25	ND	4.5	
67-63-0	2-Propanol (Isopropyl Alcohol)	ND	50	ND	20	
107-13-1	Acrylonitrile	ND	25	ND	12	
75-35-4	1,1-Dichloroethene	ND	25	ND	6.4	
75-09-2	Methylene Chloride	ND	25	ND	7.2	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	25	ND	8.0	
76-13-1	Trichlorotrifluoroethane	ND	25	ND	3.3	
75-15-0	Carbon Disulfide	ND	250	ND	81	
156-60-5	trans-1,2-Dichloroethene	ND	25	ND	6.4	
75-34-3	1,1-Dichloroethane	ND	25	ND	6.2	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By:_____ Date:_____

Client: **AECOM Environment**
Client Sample ID: **SSV_01** CAS Project ID: P1001028
Client Project ID: **Pemart Former MGP, Peekskill, NY / 60147-130-200** CAS Sample ID: P1001028-009

Test Code: EPA TO-15 Date Collected: 3/18/10
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Date Received: 3/23/10
Analyst: Wida Ang Date Analyzed: 3/30/10
Sampling Media: 6.0 L Summa Canister Volume(s) Analyzed: 0.030 Liter(s)
Test Notes:
Container ID: SC01071

Initial Pressure (psig): -2.4 Final Pressure (psig): 3.9

Canister Dilution Factor: 1.51

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
1634-04-4	Methyl tert-Butyl Ether	ND	25	ND	7.0	
108-05-4	Vinyl Acetate	ND	250	ND	72	
78-93-3	2-Butanone (MEK)	ND	250	ND	85	
156-59-2	cis-1,2-Dichloroethene	**27**	25	**6.8**	6.4	
141-78-6	Ethyl Acetate	ND	50	ND	14	
110-54-3	n-Hexane	ND	25	ND	7.1	
67-66-3	Chloroform	ND	25	ND	5.2	
109-99-9	Tetrahydrofuran (THF)	ND	25	ND	8.5	
107-06-2	1,2-Dichloroethane	ND	25	ND	6.2	
71-55-6	1,1,1-Trichloroethane	**50**	25	**9.1**	4.6	
71-43-2	Benzene	ND	25	ND	7.9	
56-23-5	Carbon Tetrachloride	ND	25	ND	4.0	
110-82-7	Cyclohexane	ND	50	ND	15	
78-87-5	1,2-Dichloropropane	ND	25	ND	5.4	
75-27-4	Bromodichloromethane	ND	25	ND	3.8	
79-01-6	Trichloroethene	**4,400**	25	**810**	4.7	
123-91-1	1,4-Dioxane	ND	25	ND	7.0	
540-84-1	2,2,4-Trimethylpentane (Isooctane)	ND	25	ND	5.4	
80-62-6	Methyl Methacrylate	ND	50	ND	12	
142-82-5	n-Heptane	ND	25	ND	6.1	
10061-01-5	cis-1,3-Dichloropropene	ND	25	ND	5.5	
108-10-1	4-Methyl-2-pentanone	ND	25	ND	6.1	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By:_____ Date:_____

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **AECOM Environment** CAS Project ID: P1001028
Client Sample ID: **SSV_01** CAS Sample ID: P1001028-009
Client Project ID: **Pemart Former MGP, Peekskill, NY / 60147-130-200**

Test Code: EPA TO-15 Date Collected: 3/18/10
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Date Received: 3/23/10
Analyst: Wida Ang Date Analyzed: 3/30/10
Sampling Media: 6.0 L Summa Canister Volume(s) Analyzed: 0.030 Liter(s)
Test Notes:
Container ID: SC01071

Initial Pressure (psig): -2.4 Final Pressure (psig): 3.9

Canister Dilution Factor: 1.51

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
10061-02-6	trans-1,3-Dichloropropene	ND	25	ND	5.5	
79-00-5	1,1,2-Trichloroethane	ND	25	ND	4.6	
108-88-3	Toluene	ND	25	ND	6.7	
591-78-6	2-Hexanone	ND	25	ND	6.1	
124-48-1	Dibromochloromethane	ND	25	ND	3.0	
106-93-4	1,2-Dibromoethane	ND	25	ND	3.3	
123-86-4	n-Butyl Acetate	ND	25	ND	5.3	
111-65-9	n-Octane	ND	25	ND	5.4	
127-18-4	Tetrachloroethene	**68**	25	**10**	3.7	
108-90-7	Chlorobenzene	ND	25	ND	5.5	
100-41-4	Ethylbenzene	ND	25	ND	5.8	
179601-23-1	m,p-Xylenes	ND	50	ND	12	
75-25-2	Bromoform	ND	25	ND	2.4	
100-42-5	Styrene	ND	25	ND	5.9	
95-47-6	o-Xylene	ND	25	ND	5.8	
111-84-2	n-Nonane	ND	25	ND	4.8	
79-34-5	1,1,2,2-Tetrachloroethane	ND	25	ND	3.7	
98-82-8	Cumene	ND	25	ND	5.1	
80-56-8	alpha-Pinene	ND	25	ND	4.5	
103-65-1	n-Propylbenzene	ND	25	ND	5.1	
622-96-8	4-Ethyltoluene	ND	25	ND	5.1	
108-67-8	1,3,5-Trimethylbenzene	ND	25	ND	5.1	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By:_____ Date:_____

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: AECOM Environment
Client Sample ID: **SSV_01** CAS Project ID: P1001028
Client Project ID: **Pemart Former MGP, Peekskill, NY / 60147-130-200** CAS Sample ID: P1001028-009

Test Code: EPA TO-15 Date Collected: 3/18/10
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Date Received: 3/23/10
Analyst: Wida Ang Date Analyzed: 3/30/10
Sampling Media: 6.0 L Summa Canister Volume(s) Analyzed: 0.030 Liter(s)
Test Notes:
Container ID: SC01071

Initial Pressure (psig): **-2.40** Final Pressure (psig): **3.90**

Canister Dilution Factor: 1.51

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
95-63-6	1,2,4-Trimethylbenzene	ND	25	ND	5.1	
100-44-7	Benzyl Chloride	ND	25	ND	4.9	
541-73-1	1,3-Dichlorobenzene	ND	25	ND	4.2	
106-46-7	1,4-Dichlorobenzene	ND	25	ND	4.2	
526-73-8	1,2,3-Trimethylbenzene	ND	25	ND	5.1	
95-50-1	1,2-Dichlorobenzene	ND	25	ND	4.2	
5989-27-5	d-Limonene	ND	25	ND	4.5	
96-12-8	1,2-Dibromo-3-chloropropane	ND	25	ND	2.6	
120-82-1	1,2,4-Trichlorobenzene	ND	25	ND	3.4	
91-20-3	Naphthalene	ND	25	ND	4.8	
87-68-3	Hexachlorobutadiene	ND	25	ND	2.4	
78-78-4	2-Methylbutane	ND	25	ND	8.5	
79-20-9	Methyl Acetate	ND	25	ND	8.3	
107-83-5	2-Methylpentane	ND	25	ND	7.1	
110-02-1	Thiophene	ND	25	ND	7.3	
565-59-3	2,3-Dimethylpentane	ND	25	ND	6.1	
108-87-2	Methylcyclohexane	ND	25	ND	6.3	
496-11-7	Indan	ND	25	ND	5.2	
95-13-6	Indene	ND	25	ND	5.3	
95-93-2	1,2,4,5-Tetramethylbenzene	ND	25	ND	4.6	
488-23-3	1,2,3,4-Tetramethylbenzene	ND	25	ND	4.6	
527-53-7	1,2,3,5-Tetramethylbenzene	ND	25	ND	4.6	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By:_____ Date:_____

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **AECOM Environment**
Client Sample ID: **SSV_03** CAS Project ID: P1001028
Client Project ID: **Pemart Former MGP, Peekskill, NY / 60147-130-200** CAS Sample ID: P1001028-010

Test Code: EPA TO-15 Date Collected: 3/18/10
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Date Received: 3/23/10
Analyst: Wida Ang Date Analyzed: 3/30/10
Sampling Media: 6.0 L Summa Canister Volume(s) Analyzed: 1.00 Liter(s)
Test Notes:
Container ID: SC00890

Initial Pressure (psig): -2.1 Final Pressure (psig): 3.6

Canister Dilution Factor: 1.45

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
115-07-1	Propene	**4.0**	0.73	**2.3**	0.42	
75-71-8	Dichlorodifluoromethane (CFC 12)	**2.5**	0.73	**0.50**	0.15	
74-87-3	Chloromethane	ND	0.73	ND	0.35	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	0.73	ND	0.10	
75-01-4	Vinyl Chloride	ND	0.73	ND	0.28	
106-99-0	1,3-Butadiene	ND	0.73	ND	0.33	
74-83-9	Bromomethane	ND	0.73	ND	0.19	
75-00-3	Chloroethane	ND	0.73	ND	0.27	
64-17-5	Ethanol	**36**	7.3	**19**	3.8	
75-05-8	Acetonitrile	ND	0.73	ND	0.43	
107-02-8	Acrolein	ND	2.9	ND	1.3	
67-64-1	Acetone	**19**	7.3	**7.9**	3.1	
75-69-4	Trichlorofluoromethane	**1.3**	0.73	**0.22**	0.13	
67-63-0	2-Propanol (Isopropyl Alcohol)	ND	1.5	ND	0.59	
107-13-1	Acrylonitrile	ND	0.73	ND	0.33	
75-35-4	1,1-Dichloroethene	ND	0.73	ND	0.18	
75-09-2	Methylene Chloride	ND	0.73	ND	0.21	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	0.73	ND	0.23	
76-13-1	Trichlorotrifluoroethane	ND	0.73	ND	0.095	
75-15-0	Carbon Disulfide	ND	7.3	ND	2.3	
156-60-5	trans-1,2-Dichloroethene	ND	0.73	ND	0.18	
75-34-3	1,1-Dichloroethane	ND	0.73	ND	0.18	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By:_____ Date:_____

Client: **AECOM Environment**
Client Sample ID: **SSV_03**
Client Project ID: **Pemart Former MGP, Peekskill, NY / 60147-130-200**

CAS Project ID: P1001028
CAS Sample ID: P1001028-010

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9
Analyst: Wida Ang
Sampling Media: 6.0 L Summa Canister
Test Notes:
Container ID: SC00890

Date Collected: 3/18/10
Date Received: 3/23/10
Date Analyzed: 3/30/10
Volume(s) Analyzed: 1.00 Liter(s)

Initial Pressure (psig): -2.1 Final Pressure (psig): 3.6

Canister Dilution Factor: 1.45

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
1634-04-4	Methyl tert-Butyl Ether	ND	0.73	ND	0.20	
108-05-4	Vinyl Acetate	ND	7.3	ND	2.1	
78-93-3	2-Butanone (MEK)	ND	7.3	ND	2.5	
156-59-2	cis-1,2-Dichloroethene	ND	0.73	ND	0.18	
141-78-6	Ethyl Acetate	ND	1.5	ND	0.40	
110-54-3	n-Hexane	**3.2**	0.73	**0.92**	0.21	
67-66-3	Chloroform	**0.91**	0.73	**0.19**	0.15	
109-99-9	Tetrahydrofuran (THF)	ND	0.73	ND	0.25	
107-06-2	1,2-Dichloroethane	ND	0.73	ND	0.18	
71-55-6	1,1,1-Trichloroethane	**7.7**	0.73	**1.4**	0.13	
71-43-2	Benzene	**2.1**	0.73	**0.66**	0.23	
56-23-5	Carbon Tetrachloride	ND	0.73	ND	0.12	
110-82-7	Cyclohexane	ND	1.5	ND	0.42	
78-87-5	1,2-Dichloropropane	ND	0.73	ND	0.16	
75-27-4	Bromodichloromethane	ND	0.73	ND	0.11	
79-01-6	Trichloroethene	ND	0.73	ND	0.13	
123-91-1	1,4-Dioxane	ND	0.73	ND	0.20	
540-84-1	2,2,4-Trimethylpentane (Isooctane)	**0.99**	0.73	**0.21**	0.16	
80-62-6	Methyl Methacrylate	ND	1.5	ND	0.35	
142-82-5	n-Heptane	**0.90**	0.73	**0.22**	0.18	
10061-01-5	cis-1,3-Dichloropropene	ND	0.73	ND	0.16	
108-10-1	4-Methyl-2-pentanone	ND	0.73	ND	0.18	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By:_____ Date:_____

Client: **AECOM Environment** CAS Project ID: P1001028

Client Sample ID: **SSV_03** CAS Sample ID: P1001028-010

Client Project ID: **Pemart Former MGP, Peekskill, NY / 60147-130-200**

Test Code: EPA TO-15 Date Collected: 3/18/10

Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Date Received: 3/23/10

Analyst: Wida Ang Date Analyzed: 3/30/10

Sampling Media: 6.0 L Summa Canister Volume(s) Analyzed: 1.00 Liter(s)

Test Notes:

Container ID: SC00890

Initial Pressure (psig): -2.1 Final Pressure (psig): 3.6

Canister Dilution Factor: 1.45

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
10061-02-6	trans-1,3-Dichloropropene	ND	0.73	ND	0.16	
79-00-5	1,1,2-Trichloroethane	ND	0.73	ND	0.13	
108-88-3	Toluene	**4.9**	0.73	**1.3**	0.19	
591-78-6	2-Hexanone	ND	0.73	ND	0.18	
124-48-1	Dibromochloromethane	ND	0.73	ND	0.085	
106-93-4	1,2-Dibromoethane	ND	0.73	ND	0.094	
123-86-4	n-Butyl Acetate	ND	0.73	ND	0.15	
111-65-9	n-Octane	ND	0.73	ND	0.16	
127-18-4	Tetrachloroethene	**130**	0.73	**20**	0.11	
108-90-7	Chlorobenzene	ND	0.73	ND	0.16	
100-41-4	Ethylbenzene	ND	0.73	ND	0.17	
179601-23-1	m,p-Xylenes	**1.6**	1.5	**0.36**	0.33	
75-25-2	Bromoform	ND	0.73	ND	0.070	
100-42-5	Styrene	ND	0.73	ND	0.17	
95-47-6	o-Xylene	ND	0.73	ND	0.17	
111-84-2	n-Nonane	**0.95**	0.73	**0.18**	0.14	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.73	ND	0.11	
98-82-8	Cumene	ND	0.73	ND	0.15	
80-56-8	alpha-Pinene	ND	0.73	ND	0.13	
103-65-1	n-Propylbenzene	ND	0.73	ND	0.15	
622-96-8	4-Ethyltoluene	ND	0.73	ND	0.15	
108-67-8	1,3,5-Trimethylbenzene	ND	0.73	ND	0.15	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By:_____ Date:_____

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: AECOM Environment
Client Sample ID: **SSV_03**
Client Project ID: **Pemart Former MGP, Peekskill, NY / 60147-130-200**

CAS Project ID: P1001028
CAS Sample ID: P1001028-010

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9
Analyst: Wida Ang
Sampling Media: 6.0 L Summa Canister
Test Notes:
Container ID: SC00890

Date Collected: 3/18/10
Date Received: 3/23/10
Date Analyzed: 3/30/10
Volume(s) Analyzed: 1.00 Liter(s)

Initial Pressure (psig): **-2.10** Final Pressure (psig): **3.60**

Canister Dilution Factor: 1.45

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
95-63-6	1,2,4-Trimethylbenzene	ND	0.73	ND	0.15	
100-44-7	Benzyl Chloride	ND	0.73	ND	0.14	
541-73-1	1,3-Dichlorobenzene	ND	0.73	ND	0.12	
106-46-7	1,4-Dichlorobenzene	ND	0.73	ND	0.12	
526-73-8	1,2,3-Trimethylbenzene	ND	0.73	ND	0.15	
95-50-1	1,2-Dichlorobenzene	ND	0.73	ND	0.12	
5989-27-5	d-Limonene	ND	0.73	ND	0.13	
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.73	ND	0.075	
120-82-1	1,2,4-Trichlorobenzene	ND	0.73	ND	0.098	
91-20-3	Naphthalene	ND	0.73	ND	0.14	
87-68-3	Hexachlorobutadiene	ND	0.73	ND	0.068	
78-78-4	2-Methylbutane	**7.1**	0.73	**2.4**	0.25	
79-20-9	Methyl Acetate	ND	0.73	ND	0.24	
107-83-5	2-Methylpentane	**2.7**	0.73	**0.77**	0.21	
110-02-1	Thiophene	ND	0.73	ND	0.21	
565-59-3	2,3-Dimethylpentane	ND	0.73	ND	0.18	
108-87-2	Methylcyclohexane	ND	0.73	ND	0.18	
496-11-7	Indan	ND	0.73	ND	0.15	
95-13-6	Indene	ND	0.73	ND	0.15	
95-93-2	1,2,4,5-Tetramethylbenzene	ND	0.73	ND	0.13	
488-23-3	1,2,3,4-Tetramethylbenzene	ND	0.73	ND	0.13	
527-53-7	1,2,3,5-Tetramethylbenzene	ND	0.73	ND	0.13	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By:_____ Date:_____

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **AECOM Environment**
Client Sample ID: **IA_03** CAS Project ID: P1001028
Client Project ID: **Pemart Former MGP, Peekskill, NY / 60147-130-200** CAS Sample ID: P1001028-011

Test Code: EPA TO-15 Date Collected: 3/18/10
nstrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Date Received: 3/23/10
Analyst: Wida Ang Date Analyzed: 3/30/10
Sampling Media: 6.0 L Summa Canister Volume(s) Analyzed: 1.00 Liter(s)
Test Notes:
Container ID: AC01569

Initial Pressure (psig): -1.4 Final Pressure (psig): 3.5

Canister Dilution Factor: 1.37

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
115-07-1	Propene	ND	0.69	ND	0.40	
75-71-8	Dichlorodifluoromethane (CFC 12)	**2.3**	0.69	**0.47**	0.14	
74-87-3	Chloromethane	ND	0.69	ND	0.33	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	0.69	ND	0.098	
75-01-4	Vinyl Chloride	ND	0.69	ND	0.27	
106-99-0	1,3-Butadiene	ND	0.69	ND	0.31	
74-83-9	Bromomethane	ND	0.69	ND	0.18	
75-00-3	Chloroethane	ND	0.69	ND	0.26	
64-17-5	Ethanol	**27**	6.9	**14**	3.6	
75-05-8	Acetonitrile	ND	0.69	ND	0.41	
107-02-8	Acrolein	ND	2.7	ND	1.2	
67-64-1	Acetone	**12**	6.9	**5.1**	2.9	
75-69-4	Trichlorofluoromethane	**1.2**	0.69	**0.21**	0.12	
67-63-0	2-Propanol (Isopropyl Alcohol)	ND	1.4	ND	0.56	
107-13-1	Acrylonitrile	ND	0.69	ND	0.32	
75-35-4	1,1-Dichloroethene	ND	0.69	ND	0.17	
75-09-2	Methylene Chloride	ND	0.69	ND	0.20	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	0.69	ND	0.22	
76-13-1	Trichlorotrifluoroethane	ND	0.69	ND	0.089	
75-15-0	Carbon Disulfide	ND	6.9	ND	2.2	
156-60-5	trans-1,2-Dichloroethene	ND	0.69	ND	0.17	
75-34-3	1,1-Dichloroethane	ND	0.69	ND	0.17	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By:_____ Date:_____

Client: **AECOM Environment**
Client Sample ID: **IA_03** CAS Project ID: P1001028
Client Project ID: **Pemart Former MGP, Peekskill, NY / 60147-130-200** CAS Sample ID: P1001028-011

Test Code: EPA TO-15 Date Collected: 3/18/10
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Date Received: 3/23/10
Analyst: Wida Ang Date Analyzed: 3/30/10
Sampling Media: 6.0 L Summa Canister Volume(s) Analyzed: 1.00 Liter(s)
Test Notes:
Container ID: AC01569

Initial Pressure (psig): -1.4 Final Pressure (psig): 3.5

Canister Dilution Factor: 1.37

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
1634-04-4	Methyl tert-Butyl Ether	ND	0.69	ND	0.19	
108-05-4	Vinyl Acetate	ND	6.9	ND	1.9	
78-93-3	2-Butanone (MEK)	ND	6.9	ND	2.3	
156-59-2	cis-1,2-Dichloroethene	ND	0.69	ND	0.17	
141-78-6	Ethyl Acetate	ND	1.4	ND	0.38	
110-54-3	n-Hexane	**1.8**	0.69	**0.52**	0.19	
67-66-3	Chloroform	ND	0.69	ND	0.14	
109-99-9	Tetrahydrofuran (THF)	ND	0.69	ND	0.23	
107-06-2	1,2-Dichloroethane	ND	0.69	ND	0.17	
71-55-6	1,1,1-Trichloroethane	ND	0.69	ND	0.13	
71-43-2	Benzene	**0.93**	0.69	**0.29**	0.21	
56-23-5	Carbon Tetrachloride	ND	0.69	ND	0.11	
110-82-7	Cyclohexane	ND	1.4	ND	0.40	
78-87-5	1,2-Dichloropropane	ND	0.69	ND	0.15	
75-27-4	Bromodichloromethane	ND	0.69	ND	0.10	
79-01-6	Trichloroethene	ND	0.69	ND	0.13	
123-91-1	1,4-Dioxane	ND	0.69	ND	0.19	
540-84-1	2,2,4-Trimethylpentane (Isooctane)	**0.89**	0.69	**0.19**	0.15	
80-62-6	Methyl Methacrylate	ND	1.4	ND	0.33	
142-82-5	n-Heptane	ND	0.69	ND	0.17	
10061-01-5	cis-1,3-Dichloropropene	ND	0.69	ND	0.15	
108-10-1	4-Methyl-2-pentanone	ND	0.69	ND	0.17	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By:_____ Date:_____

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **AECOM Environment** CAS Project ID: P1001028
Client Sample ID: **IA_03** CAS Sample ID: P1001028-011
Client Project ID: **Pemart Former MGP, Peekskill, NY / 60147-130-200**

Test Code: EPA TO-15 Date Collected: 3/18/10
nstrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Date Received: 3/23/10
Analyst: Wida Ang Date Analyzed: 3/30/10
Sampling Media: 6.0 L Summa Canister Volume(s) Analyzed: 1.00 Liter(s)
Test Notes:
Container ID: AC01569

Initial Pressure (psig): -1.4 Final Pressure (psig): 3.5

Canister Dilution Factor: 1.37

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
10061-02-6	trans-1,3-Dichloropropene	ND	0.69	ND	0.15	
79-00-5	1,1,2-Trichloroethane	ND	0.69	ND	0.13	
108-88-3	Toluene	**1.8**	0.69	**0.47**	0.18	
591-78-6	2-Hexanone	ND	0.69	ND	0.17	
124-48-1	Dibromochloromethane	ND	0.69	ND	0.080	
106-93-4	1,2-Dibromoethane	ND	0.69	ND	0.089	
123-86-4	n-Butyl Acetate	ND	0.69	ND	0.14	
111-65-9	n-Octane	ND	0.69	ND	0.15	
127-18-4	Tetrachloroethene	ND	0.69	ND	0.10	
108-90-7	Chlorobenzene	ND	0.69	ND	0.15	
100-41-4	Ethylbenzene	ND	0.69	ND	0.16	
179601-23-1	m,p-Xylenes	ND	1.4	ND	0.32	
75-25-2	Bromoform	ND	0.69	ND	0.066	
100-42-5	Styrene	ND	0.69	ND	0.16	
95-47-6	o-Xylene	ND	0.69	ND	0.16	
111-84-2	n-Nonane	ND	0.69	ND	0.13	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.69	ND	0.10	
98-82-8	Cumene	ND	0.69	ND	0.14	
80-56-8	alpha-Pinene	ND	0.69	ND	0.12	
103-65-1	n-Propylbenzene	ND	0.69	ND	0.14	
622-96-8	4-Ethyltoluene	ND	0.69	ND	0.14	
108-67-8	1,3,5-Trimethylbenzene	ND	0.69	ND	0.14	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By:_____ Date:_____

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: AECOM Environment
Client Sample ID: **IA_03**
Client Project ID: **Pemart Former MGP, Peekskill, NY / 60147-130-200**

CAS Project ID: P1001028
CAS Sample ID: P1001028-011

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9
Analyst: Wida Ang
Sampling Media: 6.0 L Summa Canister
Test Notes:
Container ID: AC01569

Date Collected: 3/18/10
Date Received: 3/23/10
Date Analyzed: 3/30/10
Volume(s) Analyzed: 1.00 Liter(s)

Initial Pressure (psig): **-1.40** Final Pressure (psig): **3.50**

Canister Dilution Factor: 1.37

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
95-63-6	1,2,4-Trimethylbenzene	ND	0.69	ND	0.14	
100-44-7	Benzyl Chloride	ND	0.69	ND	0.13	
541-73-1	1,3-Dichlorobenzene	ND	0.69	ND	0.11	
106-46-7	1,4-Dichlorobenzene	ND	0.69	ND	0.11	
526-73-8	1,2,3-Trimethylbenzene	ND	0.69	ND	0.14	
95-50-1	1,2-Dichlorobenzene	ND	0.69	ND	0.11	
5989-27-5	d-Limonene	ND	0.69	ND	0.12	
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.69	ND	0.071	
120-82-1	1,2,4-Trichlorobenzene	ND	0.69	ND	0.092	
91-20-3	Naphthalene	ND	0.69	ND	0.13	
87-68-3	Hexachlorobutadiene	ND	0.69	ND	0.064	
78-78-4	2-Methylbutane	**5.2**	0.69	**1.8**	0.23	
79-20-9	Methyl Acetate	ND	0.69	ND	0.23	
107-83-5	2-Methylpentane	**1.6**	0.69	**0.47**	0.19	
110-02-1	Thiophene	ND	0.69	ND	0.20	
565-59-3	2,3-Dimethylpentane	ND	0.69	ND	0.17	
108-87-2	Methylcyclohexane	ND	0.69	ND	0.17	
496-11-7	Indan	ND	0.69	ND	0.14	
95-13-6	Indene	ND	0.69	ND	0.14	
95-93-2	1,2,4,5-Tetramethylbenzene	ND	0.69	ND	0.12	
488-23-3	1,2,3,4-Tetramethylbenzene	ND	0.69	ND	0.12	
527-53-7	1,2,3,5-Tetramethylbenzene	ND	0.69	ND	0.12	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By:_____ Date:_____

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **AECOM Environment**
Client Sample ID: **Method Blank**
Client Project ID: **Pemart Former MGP, Peekskill, NY / 60147-130-200**

CAS Project ID: P1001028
CAS Sample ID: P100330-MB

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9
Analyst: Wida Ang
Sampling Media: 6.0 L Summa Canister
Test Notes:

Date Collected: NA
Date Received: NA
Date Analyzed: 3/30/10
Volume(s) Analyzed: 1.00 Liter(s)

Canister Dilution Factor: 1.00

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
115-07-1	Propene	ND	0.50	ND	0.29	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	0.50	ND	0.10	
74-87-3	Chloromethane	ND	0.50	ND	0.24	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	0.50	ND	0.072	
75-01-4	Vinyl Chloride	ND	0.50	ND	0.20	
106-99-0	1,3-Butadiene	ND	0.50	ND	0.23	
74-83-9	Bromomethane	ND	0.50	ND	0.13	
75-00-3	Chloroethane	ND	0.50	ND	0.19	
64-17-5	Ethanol	ND	5.0	ND	2.7	
75-05-8	Acetonitrile	ND	0.50	ND	0.30	
107-02-8	Acrolein	ND	2.0	ND	0.87	
67-64-1	Acetone	ND	5.0	ND	2.1	
75-69-4	Trichlorofluoromethane	ND	0.50	ND	0.089	
67-63-0	2-Propanol (Isopropyl Alcohol)	ND	1.0	ND	0.41	
107-13-1	Acrylonitrile	ND	0.50	ND	0.23	
75-35-4	1,1-Dichloroethene	ND	0.50	ND	0.13	
75-09-2	Methylene Chloride	ND	0.50	ND	0.14	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	0.50	ND	0.16	
76-13-1	Trichlorotrifluoroethane	ND	0.50	ND	0.065	
75-15-0	Carbon Disulfide	ND	5.0	ND	1.6	
156-60-5	trans-1,2-Dichloroethene	ND	0.50	ND	0.13	
75-34-3	1,1-Dichloroethane	ND	0.50	ND	0.12	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By:_____ Date:_____

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **AECOM Environment**
Client Sample ID: **Method Blank** CAS Project ID: P1001028
Client Project ID: **Pemart Former MGP, Peekskill, NY / 60147-130-200** CAS Sample ID: P100330-MB

Test Code: EPA TO-15 Date Collected: NA
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Date Received: NA
Analyst: Wida Ang Date Analyzed: 3/30/10
Sampling Media: 6.0 L Summa Canister Volume(s) Analyzed: 1.00 Liter(s)
Test Notes:

Canister Dilution Factor: 1.00

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
1634-04-4	Methyl tert-Butyl Ether	ND	0.50	ND	0.14	
108-05-4	Vinyl Acetate	ND	5.0	ND	1.4	
78-93-3	2-Butanone (MEK)	ND	5.0	ND	1.7	
156-59-2	cis-1,2-Dichloroethene	ND	0.50	ND	0.13	
141-78-6	Ethyl Acetate	ND	1.0	ND	0.28	
110-54-3	n-Hexane	ND	0.50	ND	0.14	
67-66-3	Chloroform	ND	0.50	ND	0.10	
109-99-9	Tetrahydrofuran (THF)	ND	0.50	ND	0.17	
107-06-2	1,2-Dichloroethane	ND	0.50	ND	0.12	
71-55-6	1,1,1-Trichloroethane	ND	0.50	ND	0.092	
71-43-2	Benzene	ND	0.50	ND	0.16	
56-23-5	Carbon Tetrachloride	ND	0.50	ND	0.080	
110-82-7	Cyclohexane	ND	1.0	ND	0.29	
78-87-5	1,2-Dichloropropane	ND	0.50	ND	0.11	
75-27-4	Bromodichloromethane	ND	0.50	ND	0.075	
79-01-6	Trichloroethene	ND	0.50	ND	0.093	
123-91-1	1,4-Dioxane	ND	0.50	ND	0.14	
540-84-1	2,2,4-Trimethylpentane (Isooctane)	ND	0.50	ND	0.11	
80-62-6	Methyl Methacrylate	ND	1.0	ND	0.24	
142-82-5	n-Heptane	ND	0.50	ND	0.12	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	ND	0.11	
108-10-1	4-Methyl-2-pentanone	ND	0.50	ND	0.12	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By:_____ Date:_____

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **AECOM Environment** CAS Project ID: P1001028
Client Sample ID: **Method Blank** CAS Sample ID: P100330-MB
Client Project ID: **Pemart Former MGP, Peekskill, NY / 60147-130-200**

Test Code: EPA TO-15 Date Collected: NA
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Date Received: NA
Analyst: Wida Ang Date Analyzed: 3/30/10
Sampling Media: 6.0 L Summa Canister Volume(s) Analyzed: 1.00 Liter(s)
Test Notes:

Canister Dilution Factor: 1.00

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	ND	0.11	
79-00-5	1,1,2-Trichloroethane	ND	0.50	ND	0.092	
108-88-3	Toluene	ND	0.50	ND	0.13	
591-78-6	2-Hexanone	ND	0.50	ND	0.12	
124-48-1	Dibromochloromethane	ND	0.50	ND	0.059	
106-93-4	1,2-Dibromoethane	ND	0.50	ND	0.065	
123-86-4	n-Butyl Acetate	ND	0.50	ND	0.11	
111-65-9	n-Octane	ND	0.50	ND	0.11	
127-18-4	Tetrachloroethene	ND	0.50	ND	0.074	
108-90-7	Chlorobenzene	ND	0.50	ND	0.11	
100-41-4	Ethylbenzene	ND	0.50	ND	0.12	
179601-23-1	m,p-Xylenes	ND	1.0	ND	0.23	
75-25-2	Bromoform	ND	0.50	ND	0.048	
100-42-5	Styrene	ND	0.50	ND	0.12	
95-47-6	o-Xylene	ND	0.50	ND	0.12	
111-84-2	n-Nonane	ND	0.50	ND	0.095	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	ND	0.073	
98-82-8	Cumene	ND	0.50	ND	0.10	
80-56-8	alpha-Pinene	ND	0.50	ND	0.090	
103-65-1	n-Propylbenzene	ND	0.50	ND	0.10	
622-96-8	4-Ethyltoluene	ND	0.50	ND	0.10	
108-67-8	1,3,5-Trimethylbenzene	ND	0.50	ND	0.10	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By:_____ Date:_____

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **AECOM Environment** CAS Project ID: P1001028
Client Sample ID: **Method Blank** CAS Sample ID: P100330-MB
Client Project ID: **Pemart Former MGP, Peekskill, NY / 60147-130-200**

Test Code: EPA TO-15 Date Collected: NA
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Date Received: NA
Analyst: Wida Ang Date Analyzed: 3/30/10
Sampling Media: 6.0 L Summa Canister Volume(s) Analyzed: 1.00 Liter(s)
Test Notes:

Canister Dilution Factor: 1.00

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
95-63-6	1,2,4-Trimethylbenzene	ND	0.50	ND	0.10	
100-44-7	Benzyl Chloride	ND	0.50	ND	0.097	
541-73-1	1,3-Dichlorobenzene	ND	0.50	ND	0.083	
106-46-7	1,4-Dichlorobenzene	ND	0.50	ND	0.083	
526-73-8	1,2,3-Trimethylbenzene	ND	0.50	ND	0.10	
95-50-1	1,2-Dichlorobenzene	ND	0.50	ND	0.083	
5989-27-5	d-Limonene	ND	0.50	ND	0.090	
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.50	ND	0.052	
120-82-1	1,2,4-Trichlorobenzene	ND	0.50	ND	0.067	
91-20-3	Naphthalene	ND	0.50	ND	0.095	
87-68-3	Hexachlorobutadiene	ND	0.50	ND	0.047	
78-78-4	2-Methylbutane	ND	0.50	ND	0.17	
79-20-9	Methyl Acetate	ND	0.50	ND	0.17	
107-83-5	2-Methylpentane	ND	0.50	ND	0.14	
110-02-1	Thiophene	ND	0.50	ND	0.15	
565-59-3	2,3-Dimethylpentane	ND	0.50	ND	0.12	
108-87-2	Methylcyclohexane	ND	0.50	ND	0.12	
496-11-7	Indan	ND	0.50	ND	0.10	
95-13-6	Indene	ND	0.50	ND	0.11	
95-93-2	1,2,4,5-Tetramethylbenzene	ND	0.50	ND	0.091	
488-23-3	1,2,3,4-Tetramethylbenzene	ND	0.50	ND	0.091	
527-53-7	1,2,3,5-Tetramethylbenzene	ND	0.50	ND	0.091	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By:_____ Date:_____

COLUMBIA ANALYTICAL SERVICES, INC.

SURROGATE SPIKE RECOVERY RESULTS

Client: **AECOM Environment**
Client Project ID: **Pemart Former MGP, Peekskill, NY / 60147-130-200** CAS Project ID: P1001028

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Date(s) Collected: 3/18/10
Analyst: Wida Ang Date(s) Received: 3/23/10
Sampling Media: 6.0 L Summa Canister(s) Date(s) Analyzed: 3/30/10
Test Notes:

Client Sample ID	CAS Sample ID	1,2-Dichloroethane-d4 % Recovered	1,2-Dichloroethane-d4 Acceptance Limits	Toluene-d8 % Recovered	Toluene-d8 Acceptance Limits	Bromofluorobenzene % Recovered	Bromofluorobenzene Acceptance Limits	Data Qualifier
Method Blank	P100330-MB	**101**	70-130	**99**	70-130	**96**	70-130	
Lab Control Sample	P100330-LCS	**98**	70-130	**98**	70-130	**100**	70-130	
IA_05	P1001028-001	**100**	70-130	**99**	70-130	**97**	70-130	
CS_01	P1001028-002	**101**	70-130	**100**	70-130	**96**	70-130	
IA_07	P1001028-003	**102**	70-130	**99**	70-130	**97**	70-130	
DUP_1	P1001028-004	**101**	70-130	**99**	70-130	**96**	70-130	
IA_06	P1001028-005	**101**	70-130	**98**	70-130	**96**	70-130	
IA_02	P1001028-006	**102**	70-130	**99**	70-130	**97**	70-130	
SSV_02	P1001028-007	**101**	70-130	**99**	70-130	**96**	70-130	
IA_01	P1001028-008	**101**	70-130	**99**	70-130	**96**	70-130	
SSV_01	P1001028-009	**102**	70-130	**99**	70-130	**95**	70-130	
SSV_01	P1001028-009DUP	**101**	70-130	**100**	70-130	**95**	70-130	
SSV_03	P1001028-010	**102**	70-130	**97**	70-130	**95**	70-130	
IA_03	P1001028-011	**101**	70-130	**99**	70-130	**95**	70-130	

Verified By:_____ Date:_____

COLUMBIA ANALYTICAL SERVICES, INC.

LABORATORY CONTROL SAMPLE SUMMARY

Client: **AECOM Environment**
Client Sample ID: **Lab Control Sample** CAS Project ID: P1001028
Client Project ID: **Pemart Former MGP, Peekskill, NY / 60147-130-200** CAS Sample ID: P100330-LCS

Test Code: EPA TO-15 Date Collected: NA
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Date Received: NA
Analyst: Wida Ang Date Analyzed: 3/30/10
Sampling Media: 6.0 L Summa Canister Volume(s) Analyzed: NA Liter(s)
Test Notes:

CAS #	Compound	Spike Amount ng	Result ng	% Recovery	CAS Acceptance Limits	Data Qualifier
115-07-1	Propene	26.3	**26.3**	**100**	58-133	
75-71-8	Dichlorodifluoromethane (CFC 12)	26.0	**24.2**	**93**	63-114	
74-87-3	Chloromethane	25.0	**24.6**	**98**	60-130	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	26.0	**24.0**	**92**	63-118	
75-01-4	Vinyl Chloride	25.3	**23.9**	**94**	63-123	
106-99-0	1,3-Butadiene	26.8	**27.3**	**102**	63-141	
74-83-9	Bromomethane	25.8	**25.9**	**100**	67-133	
75-00-3	Chloroethane	25.5	**24.8**	**97**	65-122	
64-17-5	Ethanol	130	**130**	**100**	54-137	
75-05-8	Acetonitrile	26.0	**25.3**	**97**	59-128	
107-02-8	Acrolein	26.3	**25.1**	**95**	61-131	
67-64-1	Acetone	132	**122**	**92**	60-117	
75-69-4	Trichlorofluoromethane	26.3	**23.8**	**90**	62-125	
67-63-0	2-Propanol (Isopropyl Alcohol)	48.0	**43.9**	**91**	57-125	
107-13-1	Acrylonitrile	25.8	**27.4**	**106**	66-136	
75-35-4	1,1-Dichloroethene	27.5	**27.2**	**99**	71-121	
75-09-2	Methylene Chloride	26.8	**24.8**	**93**	67-109	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	27.0	**29.6**	**110**	64-145	
76-13-1	Trichlorotrifluoroethane	27.5	**26.3**	**96**	71-124	
75-15-0	Carbon Disulfide	26.0	**25.5**	**98**	64-119	
156-60-5	trans-1,2-Dichloroethene	25.5	**25.9**	**102**	68-126	
75-34-3	1,1-Dichloroethane	26.5	**26.6**	**100**	67-124	

Verified By:_____ Date:_____

COLUMBIA ANALYTICAL SERVICES, INC.

LABORATORY CONTROL SAMPLE SUMMARY

Client: **AECOM Environment**
Client Sample ID: **Lab Control Sample**
Client Project ID: **Pemart Former MGP, Peekskill, NY / 60147-130-200**

CAS Project ID: P1001028
CAS Sample ID: P100330-LCS

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9
Analyst: Wida Ang
Sampling Media: 6.0 L Summa Canister
Test Notes:

Date Collected: NA
Date Received: NA
Date Analyzed: 3/30/10
Volume(s) Analyzed: NA Liter(s)

CAS #	Compound	Spike Amount ng	Result ng	% Recovery	CAS Acceptance Limits	Data Qualifier
1634-04-4	Methyl tert-Butyl Ether	26.3	**25.3**	**96**	67-124	
108-05-4	Vinyl Acetate	126	**169**	**134**	50-171	
78-93-3	2-Butanone (MEK)	26.8	**26.9**	**100**	69-136	
156-59-2	cis-1,2-Dichloroethene	27.0	**27.3**	**101**	68-123	
141-78-6	Ethyl Acetate	52.0	**54.4**	**105**	75-131	
110-54-3	n-Hexane	26.0	**26.4**	**102**	63-118	
67-66-3	Chloroform	27.5	**26.1**	**95**	66-124	
109-99-9	Tetrahydrofuran (THF)	26.5	**26.9**	**102**	66-129	
107-06-2	1,2-Dichloroethane	26.3	**25.5**	**97**	64-125	
71-55-6	1,1,1-Trichloroethane	26.0	**25.9**	**100**	71-123	
71-43-2	Benzene	25.8	**26.6**	**103**	63-112	
56-23-5	Carbon Tetrachloride	26.3	**26.8**	**102**	73-129	
110-82-7	Cyclohexane	51.8	**52.9**	**102**	68-118	
78-87-5	1,2-Dichloropropane	26.0	**26.5**	**102**	74-122	
75-27-4	Bromodichloromethane	26.3	**26.8**	**102**	75-125	
79-01-6	Trichloroethene	25.8	**25.0**	**97**	66-120	
123-91-1	1,4-Dioxane	26.0	**26.1**	**100**	75-127	
540-84-1	2,2,4-Trimethylpentane (Isooctane)	25.8	**25.8**	**100**	66-120	
80-62-6	Methyl Methacrylate	52.8	**56.5**	**107**	80-130	
142-82-5	n-Heptane	25.8	**26.6**	**103**	71-121	
10061-01-5	cis-1,3-Dichloropropene	24.5	**26.1**	**107**	77-130	
108-10-1	4-Methyl-2-pentanone	26.8	**28.1**	**105**	74-134	

Verified By:_____ Date:_____

COLUMBIA ANALYTICAL SERVICES, INC.

LABORATORY CONTROL SAMPLE SUMMARY

Client: **AECOM Environment**
Client Sample ID: **Lab Control Sample** CAS Project ID: P1001028
Client Project ID: **Pemart Former MGP, Peekskill, NY / 60147-130-200** CAS Sample ID: P100330-LCS

Test Code: EPA TO-15 Date Collected: NA
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Date Received: NA
Analyst: Wida Ang Date Analyzed: 3/30/10
Sampling Media: 6.0 L Summa Canister Volume(s) Analyzed: NA Liter(s)
Test Notes:

CAS #	Compound	Spike Amount ng	Result ng	% Recovery	CAS Acceptance Limits	Data Qualifier
10061-02-6	trans-1,3-Dichloropropene	27.0	**29.5**	**109**	78-134	
79-00-5	1,1,2-Trichloroethane	26.0	**26.6**	**102**	76-122	
108-88-3	Toluene	26.8	**26.1**	**97**	66-120	
591-78-6	2-Hexanone	27.0	**25.9**	**96**	72-135	
124-48-1	Dibromochloromethane	28.3	**28.5**	**101**	79-136	
106-93-4	1,2-Dibromoethane	26.3	**26.7**	**102**	76-129	
123-86-4	n-Butyl Acetate	27.5	**27.1**	**99**	68-138	
111-65-9	n-Octane	26.3	**27.0**	**103**	71-122	
127-18-4	Tetrachloroethene	25.3	**24.7**	**98**	65-132	
108-90-7	Chlorobenzene	26.5	**25.8**	**97**	66-122	
100-41-4	Ethylbenzene	26.3	**26.3**	**100**	69-122	
179601-23-1	m,p-Xylenes	51.5	**51.9**	**101**	69-122	
75-25-2	Bromoform	26.5	**27.0**	**102**	73-150	
100-42-5	Styrene	26.3	**26.9**	**102**	75-130	
95-47-6	o-Xylene	26.0	**26.5**	**102**	69-122	
111-84-2	n-Nonane	25.8	**26.2**	**102**	68-125	
79-34-5	1,1,2,2-Tetrachloroethane	27.0	**29.8**	**110**	80-126	
98-82-8	Cumene	25.3	**25.3**	**100**	70-123	
80-56-8	alpha-Pinene	24.8	**23.9**	**96**	75-128	
103-65-1	n-Propylbenzene	25.3	**25.6**	**101**	70-125	
622-96-8	4-Ethyltoluene	26.3	**26.5**	**101**	71-129	
108-67-8	1,3,5-Trimethylbenzene	26.5	**27.1**	**102**	71-125	

Verified By:_____ Date:_____

COLUMBIA ANALYTICAL SERVICES, INC.

LABORATORY CONTROL SAMPLE SUMMARY

Client: **AECOM Environment**
Client Sample ID: **Lab Control Sample** CAS Project ID: P1001028
Client Project ID: **Pemart Former MGP, Peekskill, NY / 60147-130-200** CAS Sample ID: P100330-LCS

Test Code: EPA TO-15 Date Collected: NA
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Date Received: NA
Analyst: Wida Ang Date Analyzed: 3/30/10
Sampling Media: 6.0 L Summa Canister Volume(s) Analyzed: NA Liter(s)
Test Notes:

CAS #	Compound	Spike Amount ng	Result ng	% Recovery	CAS Acceptance Limits	Data Qualifier
95-63-6	1,2,4-Trimethylbenzene	25.5	**27.3**	**107**	69-132	
100-44-7	Benzyl Chloride	26.8	**31.3**	**117**	78-144	
541-73-1	1,3-Dichlorobenzene	26.0	**27.6**	**106**	65-132	
106-46-7	1,4-Dichlorobenzene	26.3	**26.7**	**102**	66-126	
526-73-8	1,2,3-Trimethylbenzene	26.0	**27.4**	**105**	69-132	
95-50-1	1,2-Dichlorobenzene	25.8	**27.3**	**106**	67-134	
5989-27-5	d-Limonene	26.5	**24.1**	**91**	68-149	
96-12-8	1,2-Dibromo-3-chloropropane	27.0	**31.9**	**118**	76-150	
120-82-1	1,2,4-Trichlorobenzene	27.3	**29.0**	**106**	66-145	
91-20-3	Naphthalene	25.0	**27.1**	**108**	71-147	
87-68-3	Hexachlorobutadiene	26.8	**27.5**	**103**	65-140	

Verified By:_____ Date:_____

COLUMBIA ANALYTICAL SERVICES, INC.

LABORATORY DUPLICATE SUMMARY RESULTS

Client: **AECOM Environment**
Client Sample ID: **SSV_01** CAS Project ID: P1001028
Client Project ID: **Pemart Former MGP, Peekskill, NY / 60147-130-200** CAS Sample ID: P1001028-009DUP

Test Code: EPA TO-15 Date Collected: 3/18/10
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Date Received: 3/23/10
Analyst: Wida Ang Date Analyzed: 3/30/10
Sampling Media: 6.0 L Summa Canister Volume(s) Analyzed: 0.030 Liter(s)
Test Notes:
Container ID: SC01071

Initial Pressure (psig): -2.4 Final Pressure (psig): 3.9

Canister Dilution Factor: 1.51

Compound	Sample Result µg/m³	Sample Result ppbV	Duplicate Sample Result µg/m³	Duplicate Sample Result ppbV	Average µg/m³	% RPD	RPD Limit	Data Qualifier
Propene	ND	ND	ND	ND	-	-	25	
Dichlorodifluoromethane (CFC 12)	ND	ND	ND	ND	-	-	25	
Chloromethane	ND	ND	ND	ND	-	-	25	
1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	ND	ND	ND	-	-	25	
Vinyl Chloride	ND	ND	ND	ND	-	-	25	
1,3-Butadiene	ND	ND	ND	ND	-	-	25	
Bromomethane	ND	ND	ND	ND	-	-	25	
Chloroethane	ND	ND	ND	ND	-	-	25	
Ethanol	ND	ND	ND	ND	-	-	25	
Acetonitrile	ND	ND	ND	ND	-	-	25	
Acrolein	ND	ND	ND	ND	-	-	25	
Acetone	ND	ND	ND	ND	-	-	25	
Trichlorofluoromethane	ND	ND	ND	ND	-	-	25	
2-Propanol (Isopropyl Alcohol)	ND	ND	ND	ND	-	-	25	
Acrylonitrile	ND	ND	ND	ND	-	-	25	
1,1-Dichloroethene	ND	ND	ND	ND	-	-	25	
Methylene Chloride	ND	ND	ND	ND	-	-	25	
3-Chloro-1-propene (Allyl Chloride)	ND	ND	ND	ND	-	-	25	
Trichlorotrifluoroethane	ND	ND	ND	ND	-	-	25	
Carbon Disulfide	ND	ND	ND	ND	-	-	25	
trans-1,2-Dichloroethene	ND	ND	ND	ND	-	-	25	
1,1-Dichloroethane	ND	ND	ND	ND	-	-	25	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

Verified By:_____ Date:_____

COLUMBIA ANALYTICAL SERVICES, INC.

LABORATORY DUPLICATE SUMMARY RESULTS

Client: **AECOM Environment**

Client Sample ID: **SSV_01** CAS Project ID: P1001028

Client Project ID: **Pemart Former MGP, Peekskill, NY / 60147-130-200** CAS Sample ID: P1001028-009DUP

Test Code: EPA TO-15 Date Collected: 3/18/10

Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Date Received: 3/23/10

Analyst: Wida Ang Date Analyzed: 3/30/10

Sampling Media: 6.0 L Summa Canister Volume(s) Analyzed: 0.030 Liter(s)

Test Notes:

Container ID: SC01071

Initial Pressure (psig): -2.4 Final Pressure (psig): 3.9

Canister Dilution Factor: 1.51

Compound	Sample Result µg/m³	Sample Result ppbV	Duplicate Sample Result µg/m³	Duplicate Sample Result ppbV	Average µg/m³	% RPD	RPD Limit	Data Qualifier
Methyl tert-Butyl Ether	ND	ND	ND	ND	-	-	25	
Vinyl Acetate	ND	ND	ND	ND	-	-	25	
2-Butanone (MEK)	ND	ND	ND	ND	-	-	25	
cis-1,2-Dichloroethene	26.8	6.77	26.4	6.67	26.6	**2**	25	
Ethyl Acetate	ND	ND	ND	ND	-	-	25	
n-Hexane	ND	ND	ND	ND	-	-	25	
Chloroform	ND	ND	ND	ND	-	-	25	
Tetrahydrofuran (THF)	ND	ND	ND	ND	-	-	25	
1,2-Dichloroethane	ND	ND	ND	ND	-	-	25	
1,1,1-Trichloroethane	49.7	9.11	48.3	8.86	49	**3**	25	
Benzene	ND	ND	ND	ND	-	-	25	
Carbon Tetrachloride	ND	ND	ND	ND	-	-	25	
Cyclohexane	ND	ND	ND	ND	-	-	25	
1,2-Dichloropropane	ND	ND	ND	ND	-	-	25	
Bromodichloromethane	ND	ND	ND	ND	-	-	25	
Trichloroethene	4,350	811	4,410	820	4380	**1**	25	
1,4-Dioxane	ND	ND	ND	ND	-	-	25	
2,2,4-Trimethylpentane (Isooctane)	ND	ND	ND	ND	-	-	25	
Methyl Methacrylate	ND	ND	ND	ND	-	-	25	
n-Heptane	ND	ND	ND	ND	-	-	25	
cis-1,3-Dichloropropene	ND	ND	ND	ND	-	-	25	
4-Methyl-2-pentanone	ND	ND	ND	ND	-	-	25	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

Verified By:_____ Date:_____

COLUMBIA ANALYTICAL SERVICES, INC.

LABORATORY DUPLICATE SUMMARY RESULTS

Client: **AECOM Environment**
Client Sample ID: **SSV_01** CAS Project ID: P1001028
Client Project ID: **Pemart Former MGP, Peekskill, NY / 60147-130-200** CAS Sample ID: P1001028-009DUP

Test Code: EPA TO-15 Date Collected: 3/18/10
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Date Received: 3/23/10
Analyst: Wida Ang Date Analyzed: 3/30/10
Sampling Media: 6.0 L Summa Canister Volume(s) Analyzed: 0.030 Liter(s)
Test Notes:
Container ID: SC01071

Initial Pressure (psig): -2.4 Final Pressure (psig): 3.9

Canister Dilution Factor: 1.51

Compound	Sample Result µg/m³	Sample Result ppbV	Duplicate Sample Result µg/m³	Duplicate Sample Result ppbV	Average µg/m³	% RPD	RPD Limit	Data Qualifier
trans-1,3-Dichloropropene	ND	ND	ND	ND	-	-	25	
1,1,2-Trichloroethane	ND	ND	ND	ND	-	-	25	
Toluene	ND	ND	ND	ND	-	-	25	
2-Hexanone	ND	ND	ND	ND	-	-	25	
Dibromochloromethane	ND	ND	ND	ND	-	-	25	
1,2-Dibromoethane	ND	ND	ND	ND	-	-	25	
n-Butyl Acetate	ND	ND	ND	ND	-	-	25	
n-Octane	ND	ND	ND	ND	-	-	25	
Tetrachloroethene	67.6	9.98	66.1	9.76	66.85	2	25	
Chlorobenzene	ND	ND	ND	ND	-	-	25	
Ethylbenzene	ND	ND	ND	ND	-	-	25	
m,p-Xylenes	ND	ND	ND	ND	-	-	25	
Bromoform	ND	ND	ND	ND	-	-	25	
Styrene	ND	ND	ND	ND	-	-	25	
o-Xylene	ND	ND	ND	ND	-	-	25	
n-Nonane	ND	ND	ND	ND	-	-	25	
1,1,2,2-Tetrachloroethane	ND	ND	ND	ND	-	-	25	
Cumene	ND	ND	ND	ND	-	-	25	
alpha-Pinene	ND	ND	ND	ND	-	-	25	
n-Propylbenzene	ND	ND	ND	ND	-	-	25	
4-Ethyltoluene	ND	ND	ND	ND	-	-	25	
1,3,5-Trimethylbenzene	ND	ND	ND	ND	-	-	25	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

Verified By:_____ Date:_____

COLUMBIA ANALYTICAL SERVICES, INC.

LABORATORY DUPLICATE SUMMARY RESULTS

Client: **AECOM Environment**
Client Sample ID: **SSV_01** CAS Project ID: P1001028
Client Project ID: **Pemart Former MGP, Peekskill, NY / 60147-130-200** CAS Sample ID: P1001028-009DUP

Test Code: EPA TO-15 Date Collected: 3/18/10
nstrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Date Received: 3/23/10
Analyst: Wida Ang Date Analyzed: 3/30/10
Sampling Media: 6.0 L Summa Canister Volume(s) Analyzed: 0.030 Liter(s)
Test Notes:
Container ID: SC01071

Initial Pressure (psig): -2.4 Final Pressure (psig): 3.9

Canister Dilution Factor: 1.51

Compound	Sample Result µg/m³	Sample Result ppbV	Duplicate Sample Result µg/m³	Duplicate Sample Result ppbV	Average µg/m³	% RPD	RPD Limit	Data Qualifier
1,2,4-Trimethylbenzene	ND	ND	ND	ND	-	-	25	
Benzyl Chloride	ND	ND	ND	ND	-	-	25	
1,3-Dichlorobenzene	ND	ND	ND	ND	-	-	25	
1,4-Dichlorobenzene	ND	ND	ND	ND	-	-	25	
1,2,3-Trimethylbenzene	ND	ND	ND	ND	-	-	25	
1,2-Dichlorobenzene	ND	ND	ND	ND	-	-	25	
d-Limonene	ND	ND	ND	ND	-	-	25	
1,2-Dibromo-3-chloropropane	ND	ND	ND	ND	-	-	25	
1,2,4-Trichlorobenzene	ND	ND	ND	ND	-	-	25	
Naphthalene	ND	ND	ND	ND	-	-	25	
Hexachlorobutadiene	ND	ND	ND	ND	-	-	25	
2-Methylbutane	ND	ND	ND	ND	-	-	25	
Methyl Acetate	ND	ND	ND	ND	-	-	25	
2-Methylpentane	ND	ND	ND	ND	-	-	25	
Thiophene	ND	ND	ND	ND	-	-	25	
2,3-Dimethylpentane	ND	ND	ND	ND	-	-	25	
Methylcyclohexane	ND	ND	ND	ND	-	-	25	
Indan	ND	ND	ND	ND	-	-	25	
Indene	ND	ND	ND	ND	-	-	25	
1,2,4,5-Tetramethylbenzene	ND	ND	ND	ND	-	-	25	
1,2,3,4-Tetramethylbenzene	ND	ND	ND	ND	-	-	25	
1,2,3,5-Tetramethylbenzene	ND	ND	ND	ND	-	-	25	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

Verified By:_____ Date:_____

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **AECOM Environment** CAS Project ID: P1001028
Client Project ID: **Pemart Former MGP, Peekskill, NY / 60147-130-200**

Method Blank Summary

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Lab File ID: 03301003.D
Analyst: Wida Ang Date Analyzed: 3/30/10
Sampling Media: 6.0 L Summa Canister(s) Time Analyzed: 06:12
Test Notes:

Client Sample ID	CAS Sample ID	Lab File ID	Time Analyzed
Lab Control Sample	P100330-LCS	03301005.D	07:52
SSV_01	P1001028-009	03301006.D	08:34
SSV_01 (Lab Duplicate)	P1001028-009DUP	03301007.D	09:16
IA_05	P1001028-001	03301008.D	11:06
CS_01	P1001028-002	03301009.D	11:47
IA_07	P1001028-003	03301010.D	12:29
DUP_1	P1001028-004	03301011.D	13:17
IA_06	P1001028-005	03301012.D	13:59
IA_06 (Dilution)	P1001028-005	03301013.D	14:41
IA_02	P1001028-006	03301014.D	15:23
SSV_02	P1001028-007	03301015.D	16:04
IA_01	P1001028-008	03301016.D	16:46
IA_03	P1001028-011	03301019.D	19:12
SSV_03	P1001028-010	03301022.D	21:17

Verified By:_____ Date:_____

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **AECOM Environment** CAS Project ID: P1001028

Client Project ID: **Pemart Former MGP, Peekskill, NY / 60147-130-200**

Internal Standard Area and RT Summary

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Lab File ID: 03301002.D
Analyst: Wida Ang Date Analyzed: 3/30/2010
Sampling Media: 6.0 L Summa Canister(s) Time Analyzed: 05:31
Test Notes:

		IS1 (BCM)		IS2 (DFB)		IS3 (CBZ)	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
	24 Hour Standard	348553	12.89	1720706	15.85	716650	21.66
	Upper Limit	487974	13.22	2408988	16.18	1003310	21.99
	Lower Limit	209132	12.56	1032424	15.52	429990	21.33
	Client Sample ID						
01	Method Blank	344621	12.88	1696671	15.84	703262	21.65
02	Lab Control Sample	375156	12.90	1803801	15.85	738774	21.66
03	SSV_01	360193	12.89	1767625	15.84	729636	21.66
04	SSV_01 (Lab Duplicate)	351282	12.89	1714517	15.84	714504	21.65
05	IA_05	347691	12.88	1702630	15.84	711202	21.65
06	CS_01	347533	12.88	1720643	15.84	706433	21.66
07	IA_07	344869	12.89	1713129	15.84	713572	21.66
08	DUP_1	365242	12.88	1797300	15.84	746818	21.65
09	IA_06	340380	12.89	1647321	15.84	695146	21.65
10	IA_06 (Dilution)	337270	12.89	1644526	15.84	681934	21.65
11	IA_02	344103	12.89	1703127	15.84	709754	21.65
12	SSV_02	347034	12.89	1715603	15.84	714292	21.65
13	IA_01	345659	12.88	1694015	15.84	694924	21.65
14	IA_03	333200	12.88	1633836	15.84	679343	21.65
15	SSV_03	338872	12.89	1670177	15.84	701989	21.65
16							
17							
18							
19							
20							

IS1 (BCM) = Bromochloromethane
IS2 (DFB) = 1,4-Difluorobenzene
IS3 (CBZ) = Chlorobenzene-d5

AREA UPPER LIMIT = 140% of internal standard area
AREA LOWER LIMIT = 60% of internal standard area
RT UPPER LIMIT = 0.33 minutes of internal standard RT
RT LOWER LIMIT = 0.33 minutes of internal standard RT

# Column used to flag values outside QC limits with an 1.
1 = Internal standard not within the speicified limits.

Verified By:_____ Date:_____