ANNUAL SITE MANAGEMENT REPORT
FROM AUGUST 2010 TO MARCH 2012
METROPOLITAN AVENUE CAMPUS (Q686)
91-30 METROPOLITAN AVENUE
FOREST HILLS, NY
VCP AGREEMENT # V-00500

PREPARED FOR:

New York City Department of Education
Office of Environmental Health and Safety
44-36 Vernon Blvd.
Long Island City, New York 11101

PREPARED BY:

104 East 25th Street, 10th Floor
New York, New York 10010-2917

Date of Issue: March 19, 2012

ATC Associates Inc. Project No. 015.19125.1354

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PROJECT DIRECTORY

CLIENT:	New York City Department of Education Office of Environmental Health and Safety 44-36 Vernon Blvd. Long Island City, New York 11101 (718) 361-3808
PROJECT LOCATION:	Metropolitan Avenue Campus (Q686) 91-30 Metropolitan Avenue Forest Hills, New York (718) 275-2593
PROJECT TECHNICAL SUPPORT	New York State Department of Environmental Conservation 625 Broadway Albany, New York 12233 (718) 482-4065 New York City School Construction Authority 30-30 Thomson Avenue Long Island City, New York 11101 (718) 472-8000 Shaw Environmental, Inc. 1633 Broadway, 30th Floor New York, NY 10019 (212) 290-6000
DESCRIPTION OF WORK:	Review site management plan; walk-through visual inspection; review Vapor Barrier, Subslab Depressurization System and Cap Logbook; review prior reports.
ATC REPRESENTATIVES:	Gilbert Gedeon, PE, Division Manager Wagdi Abdelshahid, IH, Project Manager Husam Zeidan, Inspector

EXECUTIVE SUMMARY

This Annual Site Management Report (SMR) for Metropolitan Avenue Campus (Q686), located at 91-30 Metropolitan Avenue, Forest Hills, NY covers the period from August 23, 2010 to March 6, 2012. This SMR addresses the requirements of the Site Management Plan (SMP) dated April 2010 and New York State Department of Environmental Conservation (NYSDEC) comments sent via email to the New York City Department of Education (NYCDOE) on January 5, 2012 (See Attachment 1). The SMR also documents most recent annual site refresher training and annual site inspection conducted on March 6, 2012 pursuant to the NYSDEC-approved SMP.

The site inspection included an evaluation of engineering controls identified in the SMP, dated April 2010, which includes the vapor barrier, sub-slab depressurization system (SSDS) and cover system established at the site. In addition, ATC reviewed the custodial inspection logs and SSDS weekly and biweekly inspection logs prepared by others. Summa sampling was conducted on March 6, 2012 to assess indoor air quality after sealing the crack in Room 0021 of the school building. The crack was observed by ATC during the previous site annual inspection conducted on February 28, 2011. ATC advised the custodial staff to seal the crack with cementitious grout on February 28, 2011. The NYSDEC also required the sealing of the crack and indoor quality assessment in a letter dated January 5, 2012. Results of all indoor and outdoor samples for volatile organic compounds (VOCs) were below the New York State Department of Health (NYSDOH) Air Guideline Values (AGVs) and below the range of anticipated background levels, indicating the absence of vapor intrusion.

Based on the results of the annual site inspection, results of the confirmatory sampling and document review, ATC Associates, Inc. (ATC) concludes that the Engineering Controls (ECs) and Institutional Controls (ICs) remain unchanged, are effective, and protect public health and the environment. See Attachment 2 for the Institutional and Engineering Controls Certification Form.

1.0 INTRODUCTION

On behalf of the NYCDOE Office of Environmental Health and Safety (DOE/EHS), ATC is pleased to provide this SMR to NYSDEC for PS Q167 (Q686) located at 91-30 Metropolitan Avenue in Forest Hills, NY. The school opened in September 2010 and is currently attended by approximately 350 students. This report was completed in accordance with the SMP approved by the NYSDEC and the NYSDEC January 5, 2012 correspondence.

The scope of work for this service included:

1. Review of the school custodian's monthly inspection logs indicating his routine walk-through to identify any observed changes to the ECs and ICs;
2. SSDS Vent Inspection, Basement Inspection and Exterior Inspection;
3. Review of SMP, Operations and Maintenance Plan (O&M Plan) and Weekly and Biweekly Inspection Logs; and
4. Photographic documentation of observations.

This report was developed to document: (a) any changes to the ECs and ICs, and (b) compliance of the maintenance and monitoring program with the requirements of the SMP. This report also addresses the requirements of the January 5, 2012 letter from NYSDEC. Mr. Gilbert Gedeon, P.E., Mr. Wagdi Abdelshahid and Mr. Husam Zeidan of ATC conducted the annual site inspection on March 6, 2011. ATC met with and was accompanied by Ms. Ioana Munteanu-Ramnic, P.E. of NYSDEC, Mr. Ioannis Galatulas, the school's Custodian, and Mr. Eric Jackson, the school's Fireman.

2.0 ENGINEERING CONTROLS

The Metropolitan Avenue Campus contains engineering controls that include a Gas Vapor Barrier and an SSDS constructed beneath the school to prevent residual soil vapors from entering the buildings. In addition, a Composite Surface Cover System consisting of asphalt, concrete, pavers and soil cover was constructed to act as a barrier to direct contact from subsurface soils. A maintenance and monitoring program was developed to ensure that the ECs remain effective for the life of the building.

2.1 Vapor Barrier

The 60-mil fluid applied gas vapor barrier was installed beneath the school as a preventative measure to prevent soil vapors from entering the school building in the future. The vapor barrier is applied underneath the basement floor slab and the subsurface portions of the building's walls.

2.2 Sub-Slab Depressurization System

An SSDS was also installed beneath the new school as an added safeguard to prevent soil gas vapors from entering the school building in the future. The primary components of the SSDS are

schedule 80 PVC piping located beneath the basement floor slab and extending to the blower unit in the southern portion of the property.

2.3 Composite Cover System

A composite cover system was also installed on the school property to prevent school occupants from exposure to the underlying soils. This composite cover system is comprised of asphalt covered roads, concrete covered sidewalks, a resilient track surface, artificial turf, rubber surfacing and concrete building slabs.

3.0 INSTITUTIONAL CONTROLS

The ICs at the Site state that the owner of the Property shall:

- Comply with the Declarations of Covenants and Restrictions (DCR) and comply with all elements of the SMP;
- Operate and maintain all ECs as per the SMP;
- Inspect, maintain, and certify the integrity of the cover system consisting of asphalt covered roads, concrete covered sidewalks, a resilient track surface, artificial turf, rubber surfacing, two feet of environmentally clean fill at landscaped areas and a concrete building floor slab as required by the SMP;
- Operate, inspect, maintain, and certify the soil vapor mitigation system consisting of a vapor barrier and an active SSDS under all enclosed building structures as required in the SMP;
- Inspect and certify all ECs at a frequency and in a matter defined in the SMP;
- Report data and information relevant to Site Management for the Property at the frequency and in a manner defined in the SMP;
- Protect and replace groundwater monitoring wells as necessary to ensure the devices function in the manner specified in the SMP. *Based on email correspondence from NYSDEC dated 9/22/10 (Attachment 3) groundwater monitoring is not required but the wells must be preserved for 2 years;*
- Refrain from discontinuing the ECs without an amendment or the extinguishment of the DCR;
- Prohibit farming and vegetable gardens on the Property;
- Prohibit the use of groundwater underlying the Property unless treatment is used rendering it safe for its intended purpose;
- Prohibit all future activities on the Property that will disturb underlying native soils unless conducted as defined in the soil management provisions of the SMP;
- Use the Property as a school campus or other commercial use provided all long-term ECs and ICs included in the SMP are employed;
- Prohibit the Property from being used for purposes other than a school without an amendment or the extinguishment of the DCR approved in writing by the NYSDEC; and
- Agree to submit to NYSDEC a written statement that certifies that: (1) controls employed at the Property are unchanged from the previous certification or that any changes to the controls were approved by the NYSDEC; and, (2) nothing has occurred that impairs the

ability of the controls to protect public health and environment or that constitute a violation or failure to comply with the SMP. NYSDEC retains the right to access such Property at any time in order to evaluate the continued maintenance of any and all controls. This certification shall be submitted annually, or an alternate period of time that NYSDEC may allow. This annual statement must be certified by an expert that the NYSDEC finds acceptable.

4.0 SITE INSPECTIONS AND SSDS REPAIRS

4.1 Document Review

4.1.1 Review of Custodian's Inspection Logs

ATC reviewed the daily inspection logs and monthly inspection forms with the custodial staff from August 2010 to March 2012. The monthly inspection forms were not completed from September 2010 to February 2011 and from October 2011 to February 2012. ATC advised the custodial staff to complete the Monthly Inspection Forms on a monthly basis and immediately after a severe condition. In lieu of the missing logs, ATC reviewed the New York City School Construction Authority (SCA) biweekly inspection logs as indicated in Section 4.1.2 below. The Monthly Inspection Forms completed by the custodial staff are included in Attachment 4.

4.1.2 Review of Weekly and Biweekly Inspection Logs

ATC reviewed the weekly and biweekly logs prepared by Shaw Environmental, Inc. (Shaw) from August 23, 2010 to September 19, 2011, SCA from October 26, 2011 to January 31, 2012, and TRC Engineers, Inc. (TRC) on February 29, 2012. The biweekly inspections are performed by the SCA and its subcontractors to verify the system operation until the Building Monitoring System (BMS) is installed. These reports present the activity performed by Mr. Peter Helseth, P.E. and Mr. David Greffenius of Shaw, Mr. Stephen Kline, P.E. of SCA, and Mr. Kevin Boger of TRC during their inspections of the SSDS (See Attachment 5). ATC noted that the SSDS fan unit was operating at the time of inspections except for two incidents indicated in the table below:

Date of Incident	Issue	Corrective Measures	Date Corrected
October 5, 2010	Fan unit off while in "Auto" position.	Fan unit reset by Electrical Contractor	October 5, 2010
May 24, 2011	Gauges reading malfunctions	Dwyer Instruments and SCA notified	July 18, 2011

On October 5, 2010 Shaw observed that the SSDS fan unit was not operating. As a result, an Electrical Contractor was called in and reset the fan unit. On May 24, 2011 Shaw observed that the gauge readings did not change after turning off the SSDS fan unit. Dwyer Instruments were

called to troubleshoot, however the problems persisted. Shaw notified SCA Project Officer Mr. Al Daub to resolve the issue which was corrected on July 18, 2011.

4.2 ATC's Visual Observations

On March 6, 2012, ATC conducted visual observations and photographic documentation while accompanied by NYSDEC and the custodial staff. Site photographs are included in Attachment 6 and the Annual Inspection Form is included in Attachment 7. During the inspection, ATC noted the following:

- Work on connecting and programming the fan unit to the BMS is in progress; and
- A spare fan unit was not available at the school during the inspection but was reportedly ordered. Following the inspection, Mr. Galatulas notified ATC that a spare fan unit was delivered on March 12, 2012.

4.2.1 SSDS Vent Inspection

1. The BMS was not installed at the time of inspection but efforts are underway to commission the BMS;
2. The SSDS fan unit and indicator lights were operational;
3. Rust or other debris in the vicinity of the post, sleeve and discharge cap at the SSDS stack vent was not observed;
4. Rust of other debris in the vicinity of the inline filter was not observed; and
5. All gauges were observed to be functioning.

4.2.2 Basement Inspection

ATC inspected the accessible areas of the basement floors and walls. ATC did not observe any visible concrete cracks penetrating into the basement floor during the annual inspection. ATC's observation of the basement concrete floors was limited due to architectural finishes such as ceramic floor tiles, vinyl floor tiles, wood flooring and miscellaneous equipment and furniture. ATC did have access to the elevator pits and did not observe any visible cracks.

The ¼" size cracks in the basement Room 0021 previously observed by ATC has been sealed with cementitious grout in February 2012. It is unknown what the potential cause of the crack was, but custodial staff was advised to immediately patch any visible significant future cracks.

ATC conducted summa canister sampling via EPA method TO-15 SIM to assess the indoor air quality. Sampling for VOCs using Summa canisters was completed in the basement, on the 1st floor and outdoors on March 6, 2012 as requested by NYSDEC in the letter dated January 5, 2012.

A sample was placed in close proximity to the sealed crack in the basement floor of Room 0021 and three other samples were placed in representative areas in the basement and on the 1st floor. One sample was placed outdoors. Sampling protocols, analysis and data evaluation followed NYSDOH guidelines "Guidance for Evaluating Soil Vapor Intrusion in the State of New York" dated October 2006.

The summa samples were analyzed by an independent third party laboratory ALPHA Analytical Laboratory, a New York State NELAP-approved laboratory (Lab ID #11627) located at 320 Forbes Blvd. Mansfield, MA 02048. Descriptions of summa canister locations and summa canister sampling results are included in Attachment 8. Results of all indoor and the outdoor samples for VOCs were below the NYSDOH Indoor Air Guidelines and anticipated background levels.

Mr. Galatulas reported that flooding occurred in Rooms 1, 5, 17A and 21 due to a severe storm in May 2011. Storm water entered the basement floor through pipe penetrations in the basement walls. Eventually, the water was pumped out of the rooms and the pipe penetrations were sealed. Since then, the custodial staff did not observe any leaks or seepage through the basement walls.

4.2.3 Exterior Inspection

ATC inspected the composite cover system around the perimeter of the property including the paved and unpaved areas. There was no evidence of pavement removal. No structures have been constructed on the unpaved areas. There were no signs of soil washing or erosion. There were no signs of intrusive activities such as drilling, digging, trenching, grading or excavating. ATC also inspected the artificial turf and observed no apparent holes, cracks or deterioration. All significant exterior cracks previously observed by ATC in February 2011 have been sealed and/or repaired throughout the past year.

5.0 CONCLUSIONS AND RECOMMENDATIONS

Based on visual observations, ATC concludes the following:

1. The SSDS fan unit is operational. Biweekly SSDS inspections are being performed to verify operation of the SSDS and work on installing the BMS is continuing;
2. No visible concrete cracks penetrating into the basement floors or walls were observed during the annual inspection;
3. The ICs and ECs are in place and remain effective;
4. The O&M Plan is being implemented;
5. No changes have occurred that would reduce the ability of the controls to protect public health and the environment;
6. Access is available to the Site by NYSDEC and NYSDOH to evaluate continued maintenance of such controls; and
7. All NYSDEC requirements in a letter dated January 5, 2012 have been complied with.

Based on document review and visual observations, ATC recommends the following:

1. Continue biweekly SSDS inspections until the BMS is properly installed and connected;
2. Continue documenting all operation and maintenance activities on ECs;
3. Conduct preventative maintenance and document accordingly; and
4. Monthly inspections should be conducted and monthly inspection logs should be completed by the custodial staff.

6.0 STANDARDS OF CARE

ATC's work was performed in a professional manner with the best interest of our client in mind. Our objective was to perform our work with care, exercising the customary skills and competence of consulting professionals in the relevant disciplines. The conclusions presented in this report are professional opinions based upon visual observations and site documents review. The conclusions expressed in this report reflect only the limited inspections of specific locations. The opinions and recommendations presented herein apply to site conditions existing at the time of our observations. ATC cannot act as insurers, and no expressed or implied representation or warrant is included or intended in our report except that our work was performed, within the limits prescribed by our clients, with the customary thoroughness and competence of our profession at the time and place the services were rendered.

It is our pleasure to provide our consultative services to the NYCDOE. If you have any questions about this report, please call (212) 353-8280.

Sincerely,
ATC ASSOCIATES INC.

Michael Donovan, CIH
Senior Project Manager

Gilbert Gedeon, P.E.
Division Manager

cc: B. Orlan
Y. Efstathiou

Attachment 1
NYSDEC Comments

New York State Department of Environmental Conservation
Division of Environmental Remediation, Region 2 Office
47-40 21st Street, Long Island City, NY 11101-5407
Phone: (718) 482-4995 • **Fax:** (718) 482-6358
Website: www.dec.ny.gov

Joe Martens
Commissioner

January 5, 2012

Ms. Lee Guterman, Deputy Director
Industrial and Environmental Hygiene Division
NYC School Construction Authority
30-30 Thompson Avenue
Long Island City, New York 11101

Mr. Bernard Orlan, Director
Office of Environmental Health and Safety
NYC Department of Education
44-36 Vernon Blvd.
Long Island City, NY 11101

Re: Metropolitan Avenue Campus (Q167)
Site Code: V00500, Index: W3-0925-02-07
Annual Site Management Report for 2010

Dear Ms. Guterman and Mr. Orlan:

The New York State Department of Environmental Conservation (the Department) has received the Annual Site Management Report for 2010 (the "Report") dated March 22, 2011, which was prepared by ATC Associates on behalf of the School Construction Authority. The site is operating under the approved Site Management Plan (SMP), which specifies the first Periodic Review Report ("PRR") is due 18 months after the SMP approval (i.e., on or before February 18,, 2012). The following comments must be adequately addressed in the certified PRR to be submitted in January:

a) The quarter (1/4) inch cracks should be sealed; however, it is not necessary to repair the hairline cracks at this time. In addition, the potential cause for the cracks should be investigated to determine if anything can be done to prevent future cracking. Please note that one of cracks is in the cellar (room 0021) and it needs to be repaired.
b) In addition to sealing the cracks, the indoor air in room 0021 must be sampled to ensure that the air quality is appropriate in the School and to verify the integrity of the cover system (slab).
c) A spare blower must be available at all times.
d) Please confirm/certify that all indicator lights associated with the engineering controls are functioning properly.
e) The custodian must be instructed to fill the Monthly Inspection Checklists.

Please incorporate these comments into a Corrective Measures Work Plan, to be submitted with the PRR following the guidance (http://dec.state.ny.gov/regulations/67386.html).

The Certifications of the Institutional Controls/Engineering Controls (IC/EC) and the PRR will be due on March 19, 2012.

If you have any questions, please contact me via telephone at (718) 482-4065 or e-mail at: ixmuntea@gw.dec.state.ny.us.

Sincerely,

Ioana Munteanu-Ramnic

Ioana Munteanu-Ramnic, P.E.
Project Manager

ec w/o attachment:
J. O'Connell – NYSDEC
D. Hettrick – NYS DOH Project Manager
P. Doddapeneni, G. Gedeon, T. Y. Efstathiou – ATC Associates LLC

Attachment 2
Institutional and Engineering Controls Certification Form

New York State Department of Environmental Conservation
Division of Environmental Remediation, 11th Floor
625 Broadway, Albany, New York 12233
Phone: (518) 402-9553 **Fax:** (518) 402-9577
Website: www.dec.ny.gov

Joe Martens
Commissioner

12/28/2011

Ms. Lee Guterman
Deputy Director
NYC School Construction Authority
30-30 Thompson Avenue
Long Island City, NY 11101

Re: Reminder Notice: Site Management Periodic Review Report and IC/EC Certification Submittal
Site Name: Metropolitan Avenue Site
Site No.: V00500
Site Address: 87-01 69th Avenue & 92-34 Metropolitan Avenue
Forest Hills, NY 11375

Dear Ms. Lee Guterman:

This letter serves as a reminder that sites in active Site Management (SM) require the submittal of a periodic progress report. This report, referred to as the Periodic Review Report (PRR), must document the implementation of, and compliance with, site specific SM requirements. Section 6.3(b) of DER-10 *Technical Guidance for Site Investigation and Remediation* (available online at http://www.dec.ny.gov/regulations/67386.html) provides guidance regarding the information that must be included in the PRR. Further, if the site is comprised of multiple parcels, then you as the Certifying Party must arrange to submit one PRR for all parcels that comprise the site. The PRR must be received by the Department no later than **March 19, 2012**. Guidance on the content of a PRR is enclosed.

Site Management is defined in regulation (6 NYCRR 375-1.2(at)) and in Chapter 6 of DER-10. Depending on when the remedial program for your site was completed, SM may be governed by multiple documents (e.g., Operation, Maintenance, and Monitoring Plan; Soil Management Plan) or one comprehensive Site Management Plan.

A Site Management Plan (SMP) may contain one or all of the following elements, as applicable to the site: a plan to maintain institutional controls and/or engineering controls ("IC/EC Plan"); a plan for monitoring the performance and effectiveness of the selected remedy ("Monitoring Plan"); and/or a plan for the operation and maintenance of the selected remedy ("O&M Plan"). Additionally, the technical requirements for SM are stated in the decision document (e.g., Record of Decision) and, in some cases, the legal agreement directing the remediation of the site (e.g., order on consent, voluntary agreement, etc.).

When you submit the PRR (by the due date above), include the enclosed forms documenting that all SM requirements are being met. The Institutional Controls (ICs) portion of the form (Box 6) must be signed by you or your designated representative. If you cannot certify that all SM requirements are being met, you must submit a Corrective Measures Work Plan that identifies the actions to be taken to restore compliance. The work plan must include a schedule to be approved by the Department. The Periodic Review process will not be considered complete until all necessary corrective measures are completed and all required controls are certified. Instructions for completing the certifications are enclosed.

All site-related documents and data, including the PRR, are to be submitted in electronic format to the Department of Environmental Conservation. The Department will not approve the PRR unless all documents and data generated in support of that report have been submitted in accordance with the electronic submissions protocol. In addition, the certification forms are required to be submitted in both paper and electronic formats.

Information on the format of the data submissions can be found at:
http://www.dec.ny.gov/regulations/2586.html

The signed certification forms should be sent to Ioana Munteanu-Ramnic, Project Manager, at the following address:

New York State Department of Environmental Conservation
One Hunters Point Plaza
47-40 21st Street
Long Island City, NY 11101

Phone number: 718-482-4065. E-mail: ixmuntea@gw.dec.state.ny.us

The contact information above is also provided so that you may notify the project manager about upcoming inspections, or for any other questions or concerns that may arise in regard to the site.

Enclosures

PRR General Guidance
Certification Form Instructions
Certification Forms

cc: w/ enclosures

City of New York, Sca

ec: w/ enclosures
Ioana Munteanu-Ramnic, Project Manager
Jane O'Connell, Hazardous Waste Remediation Engineer, Region 2
Steven Bates, DOH

Enclosure 2

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
Site Management Periodic Review Report Notice
Institutional and Engineering Controls Certification Form

Site Details **Box 1**

Site No. V00500

Site Name Metropolitan Avenue Site

Site Address: 87-01 69th Avenue & 92-34 Metropolitan Avenue Zip Code: 11375
City/Town: Forest Hills
County: Queens
Site Acreage: 7.9

Reporting Period: September 01, 2010 to February 18, 2012
Reporting Period: August 23, 2010 to March 6, 2012

	YES	NO
1. Is the information above correct?	☐	☑
If NO, include handwritten above or on a separate sheet.		
2. Has some or all of the site property been sold, subdivided, merged, or undergone a tax map amendment during this Reporting Period?	☐	☑
3. Has there been any change of use at the site during this Reporting Period (see 6NYCRR 375-1.11(d))?	☐	☑
4. Have any federal, state, and/or local permits (e.g., building, discharge) been issued for or at the property during this Reporting Period?	☐	☑
If you answered YES to questions 2 thru 4, include documentation or evidence that documentation has been previously submitted with this certification form.		
5. Is the site currently undergoing development?	☐	☑

Box 2

	YES	NO
6. Is the current site use consistent with the use(s) listed below? Commercial and Industrial	☑	☐
7. Are all ICs/ECs in place and functioning as designed?	☑	☐

IF THE ANSWER TO EITHER QUESTION 6 OR 7 IS NO, sign and date below and DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.

A Corrective Measures Work Plan must be submitted along with this form to address these issues.

Signature of Owner, Remedial Party or Designated Representative

Date

SITE NO. V00500 **Box 3**

Description of Institutional Controls

Parcel	Owner	Institutional Control
3886-800	City of New York, SCA	Building Use Restriction Ground Water Use Restriction IC/EC Plan Landuse Restriction Monitoring Plan O&M Plan Site Management Plan Soil Management Plan
3886-830	City of New York, SCA	Building Use Restriction Ground Water Use Restriction IC/EC Plan Landuse Restriction Monitoring Plan O&M Plan Site Management Plan Soil Management Plan

Box 4

Description of Engineering Controls

Parcel	Engineering Control
3886-800	Cover System Subsurface Barriers Vapor Mitigation
3886-830	Cover System Subsurface Barriers Vapor Mitigation

Engineering Control Details for Site No. V00500

Engineering Control Details for Site No. V00500

Parcel:

2.2 ENGINEERING CONTROL COMPONENTS

2.2.1 Engineering Control Systems

2.2.1.1 Composite Cover System

The composite cover system is a required engineering control of the SMP. Installation of a composite cover system at the Site will prevent exposure to subsurface native soils.

The composite cover system will be comprised of asphalt-covered roads, concrete-covered sidewalks, two feet of environmentally clean fill at landscaped areas, and a concrete building floor slab. In addition, recreational areas will be constructed which will consist of a resilient track surface, synthetic turf, and rubber surfacing. Figure 11 shows the location of each of the principal cover types to be built at the Site. Details of the principal cover types are provided in Figure 11A. A Soil Management Plan is included in Appendix F of the SMP, and outlines the procedures required in the event the composite cover system is disturbed. The Soil Management Plan is also discussed in

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detail in Section 2.3.2 of the SMP. Issues related to maintenance of this cover are provided in the Monitoring Plan included in Section 4 of the SMP.

2.2.1.2 Vapor Barrier

A 60 mil vapor barrier will be installed beneath the school building as an added precaution to prevent any residual soil gas vapors from entering the school building in the future. The fluid applied vapor barrier will consist of Liquid Boot® or an approved NYCSCA equivalent which will be installed above the gravel layer containing the SSDS. Specifications and drawings regarding the installation of the vapor barrier are included in Appendix G of this SMP.

2.2.1.3 Sub Slab Depressurization System (SSDS)

A SSDS will also be installed beneath the school as an added precaution to prevent any residual soil gas vapors from entering the school building in the future. The SSDS will be installed beneath the vapor barrier and will be operated in an active mode until such time as it can be demonstrated to the satisfaction of the NYSDOH, that the system can be converted to the passive mode. Specifications and drawings regarding the installation of the SSDS are included as Appendix H of this SMP.

Procedures for operating and maintaining the SSDS system are documented in the Operation and Maintenance Plan (Section 4 of this SMP). Procedures for monitoring the system are included in the Monitoring Plan (Section 3 of this SMP). The Monitoring Plan also addresses severe condition inspections in the event that a severe condition, which may affect controls at the Site, has occurred.

2.2.2 Criteria for Completion of Remediation/Termination of Remedial Systems

2.2.2.1 Vapor Barrier

The vapor barrier is a permanent control which will be installed beneath the school building as an added precaution to prevent any residual soil gas vapors from entering the school building in the future. The vapor barrier will be placed above the gravel layer containing the SSDS. There is no monitoring or maintenance associated with the vapor barrier.

2.2.2.2 Sub Slab Depressurization System (SSDS)

An active SSDS system will also be installed beneath the school building as an added precaution to prevent any residual soil gas vapors from entering the school

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building in the future. The SSDS will be installed beneath the vapor barrier and will be operated in an active mode until such time as it can be demonstrated to the satisfaction of the NYSDEC and the NYSDOH, that the system can be converted to the passive mode. The active SSDS will not be discontinued without written approval by NYSDEC and NYSDOH. A proposal to discontinue the active SSDS may be submitted by the property owner based on confirmatory data that justifies such request. Systems will remain in place and operational until permission to discontinue use is granted in writing by NYSDEC and NYSDOH.

2.2.2.3 Composite Cover System

The composite cover system is also a permanent control and the quality and integrity of this system will be inspected at defined, regular intervals in perpetuity.

2.2.2.4 Monitored Natural Attenuation

Groundwater monitoring activities to assess natural attenuation will continue, as determined by NYSDOH and NYSDEC, until residual groundwater concentrations are found to be below NYSDEC standards or to verify continued asymptotic conditions over an extended period. Monitoring will continue until permission to discontinue is granted in writing by NYSDEC and NYSDOH. Monitoring activities are outlined in the Monitoring

Plan of the SMP.
2.3 INSTITUTIONAL CONTROLS COMPONENTS
2.3.1 Institutional Controls
A series of Institutional Controls are required under the SMP to: (1) implement, maintain and monitor Engineering Control systems and (2) prevent future exposure to residual contamination by controlling disturbances of the subsurface contamination. Adherence to these Institutional Controls on the Site (Controlled Property) is required under the Environmental Easement and will be implemented under this Site Management Plan. These Institutional Controls are:
. Compliance with the Environmental Easement by the Grantor and the Grantor's successors and assigns with all elements of this SMP;
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. All Engineering Controls must be operated and maintained as specified in this SMP;
. A composite cover system consisting of asphalt covered roads, concrete covered sidewalks, a resilient track surface, synthetic turf, rubber surfacing, two feet of environmentally clean fill at landscaped areas, and a concrete building floor slab must be inspected, certified and maintained as required in this SMP;
. A soil vapor mitigation system consisting of a vapor barrier and an active SSDS under all enclosed building structures must be inspected, certified, operated and maintained as required in this SMP;
. All Engineering Controls on the Site must be inspected and certified at a frequency and in a manner defined in the SMP;
. Data and information pertinent to Site Management for the Site must be reported at the frequency and in a manner defined in this SMP;
. Groundwater and soil vapor monitoring must be performed as defined in this SMP;
. Groundwater monitor wells and soil vapor monitoring points must be protected and replaced as necessary to ensure the devices function in the manner specified in this SMP, and;
. Engineering Controls may not be discontinued without an amendment or the extinguishment of this Environmental Easement.
The Site has a series of Institutional Controls in the form of Site restrictions. Adherence to these Institutional Controls is required by the Environmental Easement. Site restrictions that apply to the Site are:
. Vegetable gardens and farming on the Site are prohibited;
. The use of the groundwater underlying the Site is prohibited without treatment rendering it safe for intended purpose;
. All future activities on the Site that will disturb underlying soils are prohibited unless they are conducted in accordance with the soil management provisions in this SMP;
. The Site may only be used for a school campus provided that the long-term Engineering and Institutional Controls included in this SMP are employed;
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. The Site may not be used for purposes other than a school without an amendment or the extinguishment of this Environmental Easement approved in writing by the NYSDEC, and;
. Grantor agrees to submit to NYSDEC a written statement that certifies, under penalty of perjury, that: (1) controls employed at the Site are unchanged from the previous certification or that any changes to the controls were approved by the NYSDEC; and, (2) nothing has occurred that impairs the ability of the controls to protect public health and environment or that constitute a violation or failure to comply with the SMP. NYSDEC retains the right to access such Site at any time in order to evaluate the continued maintenance of any and all controls. This certification shall be submitted annually, or an alternate period of time that NYSDEC may allow. This annual statement must be certified by an expert that the NYSDEC finds acceptable.
2.2 ENGINEERING CONTROL COMPONENTS
2.2.1 Engineering Control Systems
2.2.1.1 Composite Cover System
The composite cover system is a required engineering control of the SMP. Installation of a composite cover system at the Site will prevent exposure to subsurface native soils.
The composite cover system will be comprised of asphalt-covered roads, concrete-covered sidewalks, two feet of environmentally clean fill at landscaped areas,

and a concrete building floor slab. In addition, recreational areas will be constructed which will consist of a resilient track surface, synthetic turf, and rubber surfacing. Figure 11 shows the location of each of the principal cover types to be built at the Site. Details of the principal cover types are provided in Figure 11A. A Soil Management Plan is included in Appendix F of the SMP, and outlines the procedures required in the event the composite cover system is disturbed. The Soil Management Plan is also discussed in
23
detail in Section 2.3.2 of the SMP. Issues related to maintenance of this cover are provided in the Monitoring Plan included in Section 4 of the SMP.

2.2.1.2 Vapor Barrier

A 60 mil vapor barrier will be installed beneath the school building as an added precaution to prevent any residual soil gas vapors from entering the school building in the future. The fluid applied vapor barrier will consist of Liquid Boot® or an approved NYCSCA equivalent which will be installed above the gravel layer containing the SSDS. Specifications and drawings regarding the installation of the vapor barrier are included in Appendix G of this SMP.

2.2.1.3 Sub Slab Depressurization System (SSDS)

A SSDS will also be installed beneath the school as an added precaution to prevent any residual soil gas vapors from entering the school building in the future. The SSDS will be installed beneath the vapor barrier and will be operated in an active mode until such time as it can be demonstrated to the satisfaction of the NYSDOH, that the system can be converted to the passive mode. Specifications and drawings regarding the installation of the SSDS are included as Appendix H of this SMP.

Procedures for operating and maintaining the SSDS system are documented in the Operation and Maintenance Plan (Section 4 of this SMP). Procedures for monitoring the system are included in the Monitoring Plan (Section 3 of this SMP). The Monitoring Plan also addresses severe condition inspections in the event that a severe condition, which may affect controls at the Site, has occurred.

2.2.2 Criteria for Completion of Remediation/Termination of Remedial Systems

2.2.2.1 Vapor Barrier

The vapor barrier is a permanent control which will be installed beneath the school building as an added precaution to prevent any residual soil gas vapors from entering the school building in the future. The vapor barrier will be placed above the gravel layer containing the SSDS. There is no monitoring or maintenance associated with the vapor barrier.

2.2.2.2 Sub Slab Depressurization System (SSDS)

An active SSDS system will also be installed beneath the school building as an added precaution to prevent any residual soil gas vapors from entering the school
24
building in the future. The SSDS will be installed beneath the vapor barrier and will be operated in an active mode until such time as it can be demonstrated to the satisfaction of the NYSDEC and the NYSDOH, that the system can be converted to the passive mode. The active SSDS will not be discontinued without written approval by NYSDEC and NYSDOH. A proposal to discontinue the active SSDS may be submitted by the property owner based on confirmatory data that justifies such request. Systems will remain in place and operational until permission to discontinue use is granted in writing by NYSDEC and NYSDOH.

2.2.2.3 Composite Cover System

The composite cover system is also a permanent control and the quality and integrity of this system will be inspected at defined, regular intervals in perpetuity.

2.2.2.4 Monitored Natural Attenuation

Groundwater monitoring activities to assess natural attenuation will continue, as determined by NYSDOH and NYSDEC, until residual groundwater concentrations are found to be below NYSDEC standards or to verify continued asymptotic conditions over an extended period. Monitoring will continue until permission to discontinue is granted in writing by NYSDEC and NYSDOH. Monitoring activities are outlined in the Monitoring Plan of the SMP.

2.3 INSTITUTIONAL CONTROLS COMPONENTS

2.3.1 Institutional Controls

A series of Institutional Controls are required under the SMP to: (1) implement, maintain and monitor Engineering Control systems and (2) prevent future exposure to residual contamination by controlling disturbances of the subsurface contamination. Adherence to these Institutional Controls on the Site (Controlled Property) is required under the Environmental Easement and will be implemented under this Site Management Plan. These Institutional Controls are:

Engineering Control Details for Site No. V00500

. Compliance with the Environmental Easement by the Grantor and the Grantor's successors and assigns with all elements of this SMP;
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. All Engineering Controls must be operated and maintained as specified in this SMP;
. A composite cover system consisting of asphalt covered roads, concrete covered sidewalks, a resilient track surface, synthetic turf, rubber surfacing, two feet of environmentally clean fill at landscaped areas, and a concrete building floor slab must be inspected, certified and maintained as required in this SMP;
. A soil vapor mitigation system consisting of a vapor barrier and an active SSDS under all enclosed building structures must be inspected, certified, operated and maintained as required in this SMP;
. All Engineering Controls on the Site must be inspected and certified at a frequency and in a manner defined in the SMP;
. Data and information pertinent to Site Management for the Site must be reported at the frequency and in a manner defined in this SMP;
. Groundwater and soil vapor monitoring must be performed as defined in this SMP;
. Groundwater monitor wells and soil vapor monitoring points must be protected and replaced as necessary to ensure the devices function in the manner specified in this SMP, and;
. Engineering Controls may not be discontinued without an amendment or the extinguishment of this Environmental Easement.
The Site has a series of Institutional Controls in the form of Site restrictions. Adherence to these Institutional Controls is required by the Environmental Easement. Site restrictions that apply to the Site are:
. Vegetable gardens and farming on the Site are prohibited;
. The use of the groundwater underlying the Site is prohibited without treatment rendering it safe for intended purpose;
. All future activities on the Site that will disturb underlying soils are prohibited unless they are conducted in accordance with the soil management provisions in this SMP;
. The Site may only be used for a school campus provided that the long-term Engineering and Institutional Controls included in this SMP are employed;
26
. The Site may not be used for purposes other than a school without an amendment or the extinguishment of this Environmental Easement approved in writing by the NYSDEC, and;
. Grantor agrees to submit to NYSDEC a written statement that certifies, under penalty of perjury, that: (1) controls employed at the Site are unchanged from the previous certification or that any changes to the controls were approved by the NYSDEC; and, (2) nothing has occurred that impairs the ability of the controls to protect public health and environment or that constitute a violation or failure to comply with the SMP. NYSDEC retains the right to access such Site at any time in order to evaluate the continued maintenance of any and all controls. This certification shall be submitted annually, or an alternate period of time that NYSDEC may allow. This annual statement must be certified by an expert that the NYSDEC finds acceptable.

Box 5

Periodic Review Report (PRR) Certification Statements

1. I certify by checking "YES" below that:

   a) the Periodic Review report and all attachments were prepared under the direction of, and reviewed by, the party making the certification;

   b) to the best of my knowledge and belief, the work and conclusions described in this certification are in accordance with the requirements of the site remedial program, and generally accepted engineering practices; and the information presented is accurate and compete.

YES	NO
☑	☐

2. If this site has an IC/EC Plan (or equivalent as required in the Decision Document), for each Institutional or Engineering control listed in Boxes 3 and/or 4, I certify by checking "YES" below that all of the following statements are true:

   (a) the Institutional Control and/or Engineering Control(s) employed at this site is unchanged since the date that the Control was put in-place, or was last approved by the Department;

   (b) nothing has occurred that would impair the ability of such Control, to protect public health and the environment;

   (c) access to the site will continue to be provided to the Department, to evaluate the remedy, including access to evaluate the continued maintenance of this Control;

   (d) nothing has occurred that would constitute a violation or failure to comply with the Site Management Plan for this Control; and

   (e) if a financial assurance mechanism is required by the oversight document for the site, the mechanism remains valid and sufficient for its intended purpose established in the document.

YES	NO
☑	☐

IF THE ANSWER TO QUESTION 2 IS NO, sign and date below and DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.

A Corrective Measures Work Plan must be submitted along with this form to address these issues.

_____ _____

Signature of Owner, Remedial Party or Designated Representative — Date

IC CERTIFICATIONS
SITE NO. V00500

Box 6

SITE OWNER OR DESIGNATED REPRESENTATIVE SIGNATURE

I certify that all information and statements in Boxes 1,2, and 3 are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

I BERNARD P. ORLAN (print name) at 44-36 Vernon Blvd, LIC, NY 11101 (print business address)

am certifying as OWNER (Owner or Remedial Party)

for the Site named in the Site Details Section of this form.

Bernard P Orlan
Signature of Owner, Remedial Party, or Designated Representative Rendering Certification

3/13/12
Date

IC/EC CERTIFICATIONS

Box 7

Signature

I certify that all information in Boxes 4 and 5 are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

I Gilbert Gedeon at 104 E. 25th St. Manhattan, NY 10010
print name print business address

am certifying as a for the New York City Department of Education
(Owner or Remedial Party)

STATE OF NEW YORK
GILBERT GEDEON
075399
LICENSED PROFESSIONAL ENGINEER

Signature of , for the Owner or Remedial Party, Rendering Certification

Stamp (Required for PE)

3/10/12
Date

Attachment 3
Correspondence Letter

GOLDBERG, STEVEN

From: Vadim Brevdo [mailto:vxbrevdo@gw.dec.state.ny.us]
Sent: Wednesday, September 22, 2010 9:40 AM
To: Sherwood, Michael
Subject: Re: Metropolitan June 2010 Monitoring Report_v3 - Final.pdf

Dear Mr. Sherwood,

The Department agrees to terminate groundwater monitoring program but requests that groundwater monitoring wells be preserved for the period of two years.
If you have any questions, please contact me.

Vadim Brevdo

Vadim Brevdo, P.E.
Environmental Engineer
Section Chief
NYS Dept. of Environmental Conservation
Division of Environmental Remediation
Remediation Section B
47-40 21st Street
Long Island City, NY 11101

Tel. 718-482-4928
Fax. 718-482-6358
e-mail: vxbrevdo@gw.dec.state.ny.us>> "Sherwood, Michael" <Michael.Sherwood@shawgrp.com> 9/3/2010 2:51 PM >>>
<<Metropolitan June 2010 Monitoring Report_v3 - Final.pdf>> Vadim,

FYI....As discussed.

Thanks,
Mike

Attachment 4
Custodian Monthly or Severe Condition Inspection Forms

Custodial Engineer Monthly or Severe Condition Inspection Form

Vapor Barrier and SSDS

Inspector's Name: Eric Jackson

Inspection Date/Time: 3-5-11

Purpose: (circle one) Monthly Inspection Severe Condition Inspection

		Yes / No*	Notified Person / Date
A. VAPOR BARRIER INSPECTION	1. Walk the entire basement floor	Yes	
	* Any visible cracks in the basement floor?	Yes	
	* Any visible cracks in the basement wall?		
	* Any other visible openings (unintended) in either the floor or walls?		
	* Draw approximate location of floor cracks/openings on site map.		
	* Any construction activities in basement affecting basement floor/ walls?		
	** Notification of DSF is required if cracks are noted. Include the following information: - Draw approximate location of floor and/or wall cracks/openings on site map. - Note the length of the crack/opening. Note the width of the crack/opening.		
B. SSDS INSPECTION	1. Inspect the SSDS Blower Enclosure.		
	* Any rust or other debris (bird nest, etc.) in or on SSDS Vent Stack?	NO	
	* Is the rain cap missing on the Vent Stack?	NO	
	* Is the SSDS blower unit functioning at a lower air flow than previously observed?	NO	
	* Is the spare blower unit stored in the designated secure location in the school?		
	* Can you rotate the blower wheel of the spare unit to verify it is properly lubricated?		
	* Does the Building Management System (BMS) indicate any SSDS failure?	NO	
C. EXTERIOR INSPECTION	1. Walk and inspect the entire exterior property.		
	* Are there any significant cracks or deterioration of the paved areas?		
	* Has there been any removal of any pavement?	NO	
	* Is there any soil washing or erosion (gullies, soil washed out onto the pavement)?	NO	
	* Has there been any vehicular use on the unpaved areas (tire tracks, rutting)?		
	* Have any structures been constructed on the unpaved areas?		
	* Are there any signs of intrusive activities?		
D. ACTIONS TAKEN			

Inspector's Signature:

* Any 'Yes' answers require immediate notification of Bernard Orlan, DSF, at 718-301-3606.
If no follow up inspection by DSF within 1 week of notification, re-inspection and re-notification required.

Custodial Engineer Monthly or Severe Condition Inspection Form

Vapor Barrier and SSDS

Inspector's Name: Eric Jackson

Inspection Date/Time: 4-2-11

Purpose: (circle one) Monthly Inspection Severe Condition Inspection

		Yes / No*	Notified Person / Date
A. VAPOR BARRIER INSPECTION	1. Walk the entire basement floor	Yes	
	* Any visible cracks in the basement floor?	Yes	
	* Any visible cracks in the basement wall?		
	* Any other visible openings (unintended) in either the floor or walls?		
	* Draw approximate location of floor cracks/openings on site map.		
	* Any construction activities in basement affecting basement floor/ walls?		
	** Notification of DSF is required if cracks are noted. Include the following information: - Draw approximate location of floor and/or wall cracks/openings on site map. - Note the length of the crack/opening. Note the width of the crack/opening.		
B. SSDS INSPECTION	1. Inspect the SSDS Blower Enclosure.		
	* Any rust or other debris (bird nest, etc.) in or on SSDS Vent Stack?	No	
	* Is the rain cap missing on the Vent Stack?	No	
	* Is the SSDS blower unit functioning at a lower air flow than previously observed?	No	
	* Is the spare blower unit stored in the designated secure location in the school?		
	* Can you rotate the blower wheel of the spare unit to verify it is properly lubricated?		
	* Does the Building Management System (BMS) indicate any SSDS failure?	No	
C. EXTERIOR INSPECTION	1. Walk and inspect the entire exterior property.		
	* Are there any significant cracks or deterioration of the paved areas?		
	* Has there been any removal of any pavement?	No	
	* Is there any soil washing or erosion (gullies, soil washed out onto the pavement)?	No	
	* Has there been any vehicular use on the unpaved areas (tire tracks, rutting)?		
	* Have any structures been constructed on the unpaved areas?		
	* Are there any signs of intrusive activities?		
D. ACTIONS TAKEN			

Inspector's Signature:

* Any 'Yes' answers require immediate notification of Bernard Orlan, DSF, at 718-351-3808.
If no follow up inspection by DSF within 1 week of notification, re-inspection and re-notification required.

Custodial Engineer Monthly or Severe Condition Inspection Form

Vapor Barrier and SSDS

Inspector's Name: Eric Jackson

Inspection Date/Time: 5-7-11

Purpose: (circle one) Monthly Inspection Severe Condition Inspection

		Yes / No*	Notified Person / Date
A. VAPOR BARRIER INSPECTION	1. Walk the entire basement floor	Yes	
	* Any visible cracks in the basement floor?	YES	
	* Any visible cracks in the basement wall?		
	* Any other visible openings (unintended) in either the floor or walls?		
	* Draw approximate location of floor cracks/openings on site map.		
	* Any construction activities in basement affecting basement floor/ walls?		
	** Notification of DSF is required if cracks are noted. Include the following information: - Draw approximate location of floor and/or wall cracks/openings on site map. - Note the length of the crack/opening. Note the width of the crack/opening.		
B. SSDS INSPECTION	1. Inspect the SSDS Blower Enclosure.		
	* Any rust or other debris (bird nest, etc.) in or on SSDS Vent Stack?	NO	
	* Is the rain cap missing on the Vent Stack?	NO	
	* Is the SSDS blower unit functioning at a lower air flow than previously observed?	NO	
	* Is the spare blower unit stored in the designated secure location in the school?		
	* Can you rotate the blower wheel of the spare unit to verify it is properly lubricated?		
	* Does the Building Management System (BMS) indicate any SSDS failure?	NO	
C. EXTERIOR INSPECTION	1. Walk and inspect the entire exterior property.		
	* Are there any significant cracks or deterioration of the paved areas?		
	* Has there been any removal of any pavement?	NO	
	* Is there any soil washing or erosion (gullies, soil washed out onto the pavement)?	NO	
	* Has there been any vehicular use on the unpaved areas (tire tracks, rutting)?		
	* Have any structures been constructed on the unpaved areas?		
	* Are there any signs of intrusive activities?		
D. ACTIONS TAKEN			

Inspector's Signature:

* Any 'Yes' answers require immediate notification of Bernard Orlan, DSF, at 718-361-3808.
If no follow up inspection by DSF within 1 week of notification, re-inspection and re-notification required.

Custodial Engineer Monthly or Severe Condition Inspection Form

Vapor Barrier and SSDS

Inspector's Name: Eric Jackson

Inspection Date/Time: 6-11-11

Purpose: (circle one) Monthly Inspection Severe Condition Inspection

		Yes / No*	Notified Person / Date
A. VAPOR BARRIER INSPECTION	1. Walk the entire basement floor	Yes	
	* Any visible cracks in the basement floor?	Yes	
	* Any visible cracks in the basement wall?		
	* Any other visible openings (unintended) in either the floor or walls?		
	* Draw approximate location of fidor cracks/openings on site map.		
	* Any construction activities in basement affecting basement floor/ walls?		
	** Notification of DSF is required if cracks are noted. Include the following information: - Draw approximate location of floor and/or wall cracks/openings on site map. - Note the length of the crack/opening. Note the width of the crack/opening.		
B. SSDS INSPECTION	1. Inspect the SSDS Blower Enclosure.		
	* Any rust or other debris (bird nest, etc.) in or on SSDS Vent Stack?	No	
	* Is the rain cap missing on the Vent Stack?	No	
	* Is the SSDS blower unit functioning at a lower air flow than previously observed?	No	
	* Is the spare blower unit stored in the designated secure location in the school?		
	* Can you rotate the blower wheel of the spare unit to verify it is properly lubricated?		
	* Does the Building Management System (BMS) indicate any SSDS failure?	No	
C. EXTERIOR INSPECTION	1. Walk and inspect the entire exterior property.		
	* Are there any significant cracks or deterioration of the paved areas?		
	* Has there been any removal of any pavement?	No	
	* Is there any soil washing or erosion (gullies, soil washed out onto the pavement)?	No	
	* Has there been any vehicular use on the unpaved areas (tire tracks, rutting)?		
	* Have any structures been constructed on the unpaved areas?		
	* Are there any signs of intrusive activities?		
D. ACTIONS TAKEN			

Inspector's Signature:

* Any 'Yes' answers require immediate notification of Bernard Orlen, DSF, at 718-361-3606.
If no follow up inspection by DSF within 1 week of notification, re-inspection and re-notification required.

Custodial Engineer Monthly or Severe Condition Inspection Form

Vapor Barrier and SSDS

Inspector's Name: Eric Jackson

Inspection Date/Time: 7-2-11

Purpose: (circle one) Monthly Inspection Severe Condition Inspection

		Yes / No*	Notified Person / Date
A. VAPOR BARRIER INSPECTION	1. Walk the entire basement floor	Yes	
	* Any visible cracks in the basement floor?	YES	
	* Any visible cracks in the basement wall?		
	* Any other visible openings (unintended) in either the floor or walls?		
	* Draw approximate location of floor cracks/openings on site map.		
	* Any construction activities in basement affecting basement floor/ walls?		
	** Notification of DSF is required if cracks are noted. Include the following information: - Draw approximate location of floor and/or wall cracks/openings on site map. - Note the length of the crack/opening. Note the width of the crack/opening.		
B. SSDS INSPECTION	1. Inspect the SSDS Blower Enclosure.		
	* Any rust or other debris (bird nest, etc.) in or on SSDS Vent Stack?	NO	
	* Is the rain cap missing on the Vent Stack?	NO	
	* Is the SSDS blower unit functioning at a lower air flow than previously observed?	NO	
	* Is the spare blower unit stored in the designated secure location in the school?		
	* Can you rotate the blower wheel of the spare unit to verify it is properly lubricated?		
	* Does the Building Management System (BMS) indicate any SSDS failure?	NO	
C. EXTERIOR INSPECTION	1. Walk and inspect the entire exterior property.		
	* Are there any significant cracks or deterioration of the paved areas?		
	* Has there been any removal of any pavement?	NO	
	* Is there any soil washing or erosion (gullies, soil washed out onto the pavement)?	NO	
	* Has there been any vehicular use on the unpaved areas (tire tracks, rutting)?		
	* Have any structures been constructed on the unpaved areas?		
	* Are there any signs of intrusive activities?		
D. ACTIONS TAKEN			

Inspector's Signature:

* Any 'Yes' answers require immediate notification of Bernard Orlan, DSF, at 718-361-3808.
If no follow up inspection by DSF within 1 week of notification, re-inspection and re-notification required.

Custodial Engineer Monthly or Severe Condition Inspection Form

Vapor Barrier and SSDS

Inspector's Name: Eric Jackson

Inspection Date/Time: 8-13-11

Purpose: (circle one) Monthly Inspection Severe Condition Inspection

		Yes / No*	Notified Person / Date
A. VAPOR BARRIER INSPECTION	1. Walk the entire basement floor	Yes	
	* Any visible cracks in the basement floor?	Yes	
	* Any visible cracks in the basement wall?		
	* Any other visible openings (unintended) in either the floor or walls?		
	* Draw approximate location of floor cracks/openings on site map.		
	* Any construction activities in basement affecting basement floor/ walls?		
	** Notification of DSF is required if cracks are noted. Include the following information: - Draw approximate location of floor and/or wall cracks/openings on site map. - Note the length of the crack/opening. Note the width of the crack/opening.		
B. SSDS INSPECTION	1. Inspect the SSDS Blower Enclosure.		
	* Any rust or other debris (bird nest, etc.) in or on SSDS Vent Stack?	No	
	* Is the rain cap missing on the Vent Stack?	No	
	* Is the SSDS blower unit functioning at a lower air flow than previously observed?	NO	
	* Is the spare blower unit stored in the designated secure location in the school?		
	* Can you rotate the blower wheel of the spare unit to verify it is properly lubricated?		
	* Does the Building Management System (BMS) indicate any SSDS failure?	NO	
C. EXTERIOR INSPECTION	1. Walk and inspect the entire exterior property.		
	* Are there any significant cracks or deterioration of the paved areas?		
	* Has there been any removal of any pavement?	NO	
	* Is there any soil washing or erosion (gullies, soil washed out onto the pavement)?	NO	
	* Has there been any vehicular use on the unpaved areas (tire tracks, rutting)?		
	* Have any structures been constructed on the unpaved areas?		
	* Are there any signs of intrusive activities?		
D. ACTIONS TAKEN			

Inspector's Signature:

* Any 'Yes' answers require immediate notification of Bernard Orlan, DSF, at 718-361-3808.
If no follow up inspection by DSF within 1 week of notification, re-inspection and re-notification required.

Custodial Engineer Monthly or Severe Condition Inspection Form

Vapor Barrier and SSDS

Inspector's Name: Eric Jackson

Inspection Date/Time: 6-10-11

Purpose: (circle one) Monthly Inspection Severe Condition Inspection

		Yes / No*	Notified Person / Date
A. VAPOR BARRIER INSPECTION	1. Walk the entire basement floor	Yes	
	* Any visible cracks in the basement floor?	Yes	
	* Any visible cracks in the basement wall?		
	* Any other visible openings (unintended) in either the floor or walls?		
	* Draw approximate location of floor cracks/openings on site map.		
	* Any construction activities in basement affecting basement floor/ walls?		
	** Notification of DSF is required if cracks are noted. Include the following information: - Draw approximate location of floor and/or wall cracks/openings on site map. - Note the length of the crack/opening. Note the width of the crack/opening.		
B. SSDS INSPECTION	1. Inspect the SSDS Blower Enclosure.		
	* Any rust or other debris (bird nest, etc.) in or on SSDS Vent Stack?	No	
	* Is the rain cap missing on the Vent Stack?	No	
	* Is the SSDS blower unit functioning at a lower air flow than previously observed?	No	
	* Is the spare blower unit stored in the designated secure location in the school?		
	* Can you rotate the blower wheel of the spare unit to verify it is properly lubricated?		
	* Does the Building Management System (BMS) indicate any SSDS failure?	No	
C. EXTERIOR INSPECTION	1. Walk and inspect the entire exterior property.		
	* Are there any significant cracks or deterioration of the paved areas?		
	* Has there been any removal of any pavement?		
	* Is there any soil washing or erosion (gullies, soil washed out onto the pavement)?	No	
	* Has there been any vehicular use on the unpaved areas (tire tracks, rutting)?	No	
	* Have any structures been constructed on the unpaved areas?		
	* Are there any signs of intrusive activities?		
D. ACTIONS TAKEN			

Inspector's Signature:

* Any 'Yes' answers require immediate notification of Bernard Orlan, DSF, at 718-361-3806.
If no follow up inspection by DSF within 1 week of notification, re-inspection and re-notification required.

Custodial Engineer Monthly or Severe Condition Inspection Form

Vapor Barrier and SSDS

Inspector's Name: Eric Jackson

Inspection Date/Time: 10-5-11

Purpose: (circle one) (Monthly Inspection) Severe Condition Inspection

		Yes / No*	Notified Person / Date
A. VAPOR BARRIER INSPECTION	1. Walk the entire basement floor	Yes	
	* Any visible cracks in the basement floor?	Yes	
	* Any visible cracks in the basement wall?		
	* Any other visible openings (unintended) in either the floor or walls?		
	* Draw approximate location of floor cracks/openings on site map.		
	* Any construction activities in basement affecting basement floor/ walls?		
	** Notification of DSF is required if cracks are noted. Include the following information: - Draw approximate location of floor and/or wall cracks/openings on site map. - Note the length of the crack/opening. Note the width of the crack/opening.		
B. SSDS INSPECTION	1. Inspect the SSDS Blower Enclosure.		
	* Any rust or other debris (bird nest, etc.) in or on SSDS Vent Stack?	NO	
	* Is the rain cap missing on the Vent Stack?	NO	
	* Is the SSDS blower unit functioning at a lower air flow than previously observed?	NO	
	* Is the spare blower unit stored in the designated secure location in the school?		
	* Can you rotate the blower wheel of the spare unit to verify it is properly lubricated?		
	* Does the Building Management System (BMS) indicate any SSDS failure?	NO	
C. EXTERIOR INSPECTION	1. Walk and inspect the entire exterior property.		
	* Are there any significant cracks or deterioration of the paved areas?		
	* Has there been any removal of any pavement?	NO	
	* Is there any soil washing or erosion (gullies, soil washed out onto the pavement)?	NO	
	* Has there been any vehicular use on the unpaved areas (tire tracks, rutting)?		
	* Have any structures been constructed on the unpaved areas?		
	* Are there any signs of intrusive activities?		
D. ACTIONS TAKEN			

Inspector's Signature:

* Any 'Yes' answers require immediate notification of Bernard Orlan, DSF, at 718-361-3600.
If no follow up inspection by DSF within 1 week of notification, re-inspection and re-notification required.

Custodial Engineer Monthly or Severe Condition Inspection Form
Vapor Barrier and SSDS

Inspector's Name: Eric Jackson

Inspection Date/Time: 3/6/12

Purpose: (circle one) Monthly Inspection Severe Condition Inspection

		Yes / No*	Notified Person / Date
A. VAPOR BARRIER INSPECTION	**1. Walk the entire basement floor**		
	* Any visible cracks in the basement floor?	Yes	
	* Any visible cracks in the basement wall?	NO	
	* Any other visible openings (unintended) in either the floor or walls?	NO	
	* Draw approximate location of floor cracks/openings on site map.	NO	
	* Any construction activities in basement affecting basement floor/ walls?	N-A	
	** Notification of DSF is required if cracks are noted. Include the following information: - Draw approximate location of floor and/or wall cracks/openings on site map. - Note the length of the crack/opening. Note the width of the crack/opening.	N-A	
B. SSDS INSPECTION	**1. Inspect the SSDS Blower Enclosure.**		
	* Any rust or other debris (bird nest, etc.) in or on SSDS Vent Stack?	NO	
	* Is the rain cap missing on the Vent Stack?	NO	
	* Is the SSDS blower unit functioning at a lower air flow than previously observed?	Yes	
	* Is the spare blower unit stored in the designated secure location in the school?	NO	
	* Can you rotate the blower wheel of the spare unit to verify it is properly lubricated?		
	* Does the Building Management System (BMS) indicate any SSDS failure?		
C. EXTERIOR INSPECTION	**1. Walk and inspect the entire exterior property.**		
	* Are there any significant cracks or deterioration of the paved areas?	NO	
	* Has there been any removal of any pavement?	NO	
	* Is there any soil washing or erosion (gullies, soil washed out onto the pavement)?	NO	
	* Has there been any vehicular use on the unpaved areas (tire tracks, rutting)?	NO	
	* Have any structures been constructed on the unpaved areas?	NO	
	* Are there any signs of intrusive activities?	NO	
D. ACTIONS TAKEN			

Inspector's Signature: [signature]

* Any 'Yes' answers require immediate notification of Bernard Orlan, DSF, at 718-361-3808.
If no follow up inspection by DSF within 1 week of notification, re-inspection and re-notification required.

Attachment 5
Weekly and Biweekly Inspection Logs

Shaw Environmental & Infrastructure
Engineering of NY, P.C.
1633 Broadway, 30th Floor
New York, NY 10019
212-290-6000
FAX: 212-290-6001

Shaw® Shaw Environmental & Infrastructure Engineering of NY, P.C.

March 8, 2012

Ms. Lee Guterman
Deputy Director
Industrial & Environmental Hygiene Division
New York City School Construction Authority
30-30 Thomson Avenue
Long Island City, New York 11101

Re: Engineer Certification of Environmental Monitoring Activities
Metropolitan Avenue Site
9130 Metropolitan Avenue
Forest Hills, New York 11375
SCA LLW# 012545/SCA Job# 16032
VCP No. V-00500-2

Dear Ms. Guterman:

Pursuant to the New York State Department of Environmental Conservation (NYSDEC)-approved November 2008 Site Management Plan, this letter certifies the following:

- On August 23, 2010, Shaw Environmental, Inc. (Shaw) inspected the sub-slab depressurization system (SSDS) fan units to confirm that the system was operating as designed.
- Between September 14, 2010 and November 2, 2010, Shaw performed weekly inspections of the SSDS fan units to confirm that the system was operating as designed.
- Between November 16, 2010 and June 7, 2011, Shaw performed biweekly inspections of the SSDS fan units to confirm that the system was operating as designed.
- Shaw reviewed the June 21, 2011 to January 31, 2012 biweekly inspection reports prepared by NYCSCA to confirm that the system was operating as designed.
- Shaw reviewed the February 29, 2012 biweekly inspection report prepared by TRC to confirm that the system was operating as designed.

If you have any questions, please feel free to contact me at 212 290-6000.

Sincerely,

Shaw Environmental & Infrastructure
Engineering of NY, P.C.

STATE OF NEW YORK PAUL FARRINGTON No. 62242 LICENSED PROFESSIONAL ENGINEER 03/08/2012

Paul Farrington, P.E.
NYS Professional Engineer #062242

FIELD ACTIVITY DAILY LOG

Shaw® Shaw Environmental, Inc.

Project Name: NYCSCA Metropolitan Avenue **Date:** 8/23/10
Field Activity Subject: SSDS Start-up Inspection
Description of Daily Activities and Events:

- 1:00 PM Shaw on site.

- I arrived on site and first inspected the Northeast Corner monitoring port. The port had been terminated with a quick disconnect valve, controlled by a ball valve. I took a reading but the negative pressure reading with only -0.030 inches. I checked the blower unit and discovered that it was not running, despite prior reports that it had been running since 8/19/10.
- I called SCA Project Officer Al Daub to inform him I was performing the SSDS Start-up Inspection and the blower unit was not running. Al called the contractor and told him to turn on the blower unit for me so I could take readings at the four monitoring ports.
- After a 30 minute wait for the contractor, the blower unit was turned on while I tested the monitoring ports.
- I went back to the front of the building to test the monitoring ports. The vacuum meter, now with the blower operating, had the following readings at each monitoring station:

    - Northeast Corner ➔ -0.328 inches of water
    - Northeast Front ➔ -0.062 inches of water
    - Northwest Front ➔ -0.222 inches of water
    - Northwest Corner ➔ -0.337 inches of water

  All measurements comply with NYSDOH & US EPA Performance Criteria of 0.010 inches of water, negative pressure beneath the slab

- It is assumed that the reading at the Northeast Corner was lower than the others because the contractor turned off the blower unit after the third monitoring port was tested. CM turned on the blower unit again and I collected the final reading (Northeast Front).
- All monitoring ports were installed with quick disconnects and ball valves, consistent with the contract documents.
- 2:45 PM Shaw off site.

Visitors on Site:	**Changes from Plans and Specifications and Other Special Orders and Important Decisions:**
Weather Conditions: 70°F, Overcast	
Shaw Personnel On Site: Peter Helseth, P.E.	**Important Telephone Calls:** Michael Sherwood

FIELD ACTIVITY DAILY LOG

Shaw® Shaw Environmental, Inc.

Project Name: NYCSCA Metropolitan Avenue **Date:** 9/14/10
Field Activity Subject: SSDS Weekly Inspection
Description of Daily Activities and Events:

- 9:30 AM Shaw on site.

- I arrived on site and inspected the blower unit behind the school building. The blower unit was operating.
- An on/off switch was installed on the outside of the unit and there was also a green light display indicating that the blower unit was operating without problems.
- Along the walk to Metropolitan Avenue, I noticed large amounts of soil had been moved to the other side of the driveway fencing, towards the railroad tracks. The soil appeared to excess soils from the site and it filled the entire swale that use to run across this property. The approximate depth appeared to be 4' to 6' and the width appeared to extend approximately 10' horizontally. We are concerned that this soil may have been piled on monitoring well SCA-7. Mike Sherwood discussed this issue to Al Daub and asked him address it with Contractor ASAP.
- Picture of the soil is shown below:

- 10:00 AM Shaw off site.

Visitors on Site:	**Changes from Plans and Specifications and Other Special Orders and Important Decisions:**
Weather Conditions: 72°F, Sunny	
Shaw Personnel On Site: Peter Helseth, P.E.	**Important Telephone Calls:**

FIELD ACTIVITY DAILY LOG

Shaw® Shaw Environmental, Inc.

Project Name: NYCSCA Metropolitan Avenue **Date:** 9/21/10
Field Activity Subject: SSDS Weekly Inspection
Description of Daily Activities and Events:

- 11:45 AM Shaw on site.

- I arrived on site and inspected the blower unit behind the school building. The blower unit was operating.
- The on/off switch was on and there was also a green light display indicating that the blower unit was operating without problems.
- I looked at monitoring well SCA-8A in the pavement near the blower unit. The monitoring well had been partial paved over and appeared to be capped approximately 2 inches below the pavement.
- Al Daub was informed of this monitoring well and was also asked to address the backfill placed over the fence near the railroad tracks with Contractor ASAP. It appears that this soil pile has covered over monitoring well SCA-7.
- Picture of monitoring well SCA-8A is shown below:

- 12:15 PM Shaw off site.

Visitors on Site:	**Changes from Plans and Specifications and Other Special Orders and Important Decisions:**
Weather Conditions: 69°F, Sunny	**Important Telephone Calls:**
Shaw Personnel On Site: Peter Helseth, P.E.	

FIELD ACTIVITY DAILY LOG

Shaw® Shaw Environmental, Inc.

Project Name: NYCSCA Metropolitan Avenue **Date:** 9/28/10
Field Activity Subject: SSDS Weekly Inspection
Description of Daily Activities and Events:

- 8:30 AM Shaw on site.

- I arrived on site and met Al Daub in the rear of the building. We inspected the blower unit behind the school building. The blower unit was operating.
- The on/off switch was on and there was also a green light display indicating that the blower unit was operating without problems.
- There was a car parked over monitoring well SCA-8A so I was unable to access it. Al stated that he would park there next Tuesday so I could access it then.
- I showed Al the approximate location of SCA-7 which has been covered over with backfill. Al said he would ask the contractors to uncover this monitoring well.

- 8:50 AM Shaw off site.

Visitors on Site:	**Changes from Plans and Specifications and Other Special Orders and Important Decisions:**
Weather Conditions: 72°F, Raining	**Important Telephone Calls:**
Shaw Personnel On Site: Peter Helseth, P.E.	

FIELD ACTIVITY DAILY LOG

Shaw® Shaw Environmental, Inc.

Project Name: NYCSCA Metropolitan Avenue **Date:** 10/5/10

Field Activity Subject: SSDS Weekly Inspection

Description of Daily Activities and Events:

- 8:00 AM Shaw on site.

- I arrived on site and inspected the blower unit behind the school building. The blower unit was off with the switch in the "Auto" position. The green light indicating normal performance was also off.
- I went inside the school and found Al Daub to explain the blower unit was off. Al called the contractor and asked him to quickly come out to inspection the unit.
- While I waited for the contractor, I began digging out monitoring well SCA-8A which is located in the parking area near the blower unit. The monitoring port had been paved over almost completely.
- As I removed the asphalt around the manhole, I began to realize the cover was broken. I continued to remove asphalt until I could lift the cover off.
- Once I got the cover off, I realized there was no housing installed on top of the casing for the manhole cover to sit in. Also, the paving contractor had allowed asphalt to fall inside the casing around the PVC pipe. I cleaned out the monitoring port as best as possible with my tools. See the picture below:

- At this point, the electrical contractor came out to the blower unit and reset it. After resetting the blower unit, it operated properly.
- I went in the school again to get Al Daub and show him the damage to the monitoring port. I explained the current state could be a hazard for a car parking in this space and also a problem for the PVC pipe inside that is not well protected. He said he would speak with the contractor and get back to me about a solution.
- The approximate location of SCA-7 which has been covered over with backfill and shown to Al Daub previously has not been touched yet.

- 9:00 AM Shaw off site.

Visitors on Site:	**Changes from Plans and Specifications and Other Special Orders and Important Decisions:**
Weather Conditions: 59°F, Overcast	**Important Telephone Calls:**
Shaw Personnel On Site: Peter Helseth, P.E.	Michael Sherwood

FIELD ACTIVITY DAILY LOG

Shaw® Shaw Environmental, Inc.

Project Name: NYCSCA Metropolitan Avenue **Date:** 10/12/10
Field Activity Subject: SSDS Weekly Inspection
Description of Daily Activities and Events:

- 9:00 AM Shaw on site.

- I arrived on site and inspected the blower unit behind the school building. The blower unit was operating properly. The green light indicating normal performance was on.
- I inspected monitoring well SCA-8A in the parking area near the blower unit. No changes had been made to the condition on the monitoring well.
- I walked over to the approximate location of monitoring well SCA-7 which was been previously backfilled over. When I reached the location, I noticed that the contractor had dug down and found this monitoring well. The top cover was exposed and had a construction cone next to it, see the picture below:

- I did not have my tools with me today so I was unable to open the cover. However, the cover and casing appeared to be in good condition, just dirty from the soil cover.
- On the next inspection, I will open this monitoring well and recheck the status of the SCA-8A.

- 9:30 AM Shaw off site.

Visitors on Site:	**Changes from Plans and Specifications and Other Special Orders and Important Decisions:**
Weather Conditions: 65°F, Overcast	**Important Telephone Calls:**
Shaw Personnel On Site: Peter Helseth, P.E.	

FIELD ACTIVITY DAILY LOG

Shaw® Shaw Environmental, Inc.

Project Name: NYCSCA Metropolitan Avenue **Date:** 10/19/10
Field Activity Subject: SSDS Weekly Inspection
Description of Daily Activities and Events:

- 8:45 AM Shaw on site.

- I arrived on site and inspected the blower unit behind the school building. The blower unit was operating properly. The green light indicating normal performance was on.
- I inspected monitoring well SCA-8A in the parking area near the blower unit. No changes had been made to the condition on the monitoring well.
- I walked over to the approximate location of monitoring well SCA-7 which was previously found beneath backfill on my last inspection. When I reached the location, I noticed that the contractor adjusted the manhole to meet the new grade. I did not access the new encased manhole as the surrounding soils were saturated. See the picture below:

- On the next inspection, I will try to open this monitoring well SCA-7 and recheck the status of SCA-8A.
- I spoke with Al Daub before leaving the site who informed me that the BMS system was still very early in the process of being completed.

- 9:15 AM Shaw off site.

Visitors on Site:	**Changes from Plans and Specifications and Other Special Orders and Important Decisions:**
Weather Conditions: 60°F, Overcast	**Important Telephone Calls:**
Shaw Personnel On Site: Peter Helseth, P.E.	

FIELD ACTIVITY DAILY LOG

Shaw® Shaw Environmental, Inc.

Project Name: NYCSCA Metropolitan Avenue **Date:** 10/26/10
Field Activity Subject: SSDS Weekly Inspection
Description of Daily Activities and Events:

- 8:45 AM Shaw on site.

- I arrived on site and inspected the blower unit behind the school building. The blower unit was operating properly. The green light indicating normal performance was on.
- I inspected monitoring well SCA-8A in the parking area near the blower unit. No changes had been made to the condition on the monitoring well.
- I walked over to the location of monitoring well SCA-7. The conditions were dry today and I inspect the newly encased well. The top cover was not bolted shut. When I lifted the cover, the PVC pipe within the monitoring well was intact. The PVC height has not been adjusted and is approximately 18" below the new top of casing. Two pictures of this are shown below:

Top of cover:

Inside the monitoring well:

FIELD ACTIVITY DAILY LOG

Shaw® Shaw Environmental, Inc.

- On the next inspection, I will recheck the status of SCA-8A.
- 9:15 AM Shaw off site.

Visitors on Site:	**Changes from Plans and Specifications and Other Special Orders and Important Decisions:**
Weather Conditions: 65°F, Sunny	**Important Telephone Calls:**
Shaw Personnel On Site: Peter Helseth, P.E.	

FIELD ACTIVITY DAILY LOG

Shaw® Shaw Environmental, Inc.

Project Name: NYCSCA Metropolitan Avenue **Date:** 11/2/10
Field Activity Subject: SSDS Bi-Weekly Inspection
Description of Daily Activities and Events:

- 9:30 AM Shaw on site.

- I arrived on site and inspected the blower unit behind the school building. The blower unit was operating properly. The green light indicating normal performance was on.
- I inspected monitoring well SCA-8A in the parking area near the blower unit. No changes had been made to the condition on the monitoring well.
- The next inspection will be on Nov 16th.

- 9:45 AM Shaw off site.

Visitors on Site:	**Changes from Plans and Specifications and Other Special Orders and Important Decisions:**
Weather Conditions: 40°F, Cloudy	**Important Telephone Calls:**
Shaw Personnel On Site: Peter Helseth, P.E.	

FIELD ACTIVITY DAILY LOG

Shaw® Shaw Environmental, Inc.

Project Name: NYCSCA Metropolitan Avenue **Date:** 11/16/10
Field Activity Subject: SSDS Bi-Weekly Inspection
Description of Daily Activities and Events:

- 9:30 AM Shaw on site.

- I arrived on site and inspected the blower unit behind the school building. The blower unit was operating properly. The green light indicating normal performance was on.
- I inspected monitoring well SCA-8A in the parking area near the blower unit. No changes had been made to the condition on the monitoring well.
- The fence to the blower unit was locked and I was unable to access the inside of the blower unit to inspect gauges and flow switches. I will contact the project officer ahead of my next visit to unlock the fence for me.
- The next inspection will be on Nov 30th.

- 9:45 AM Shaw off site.

Visitors on Site:	**Changes from Plans and Specifications and Other Special Orders and Important Decisions:**
Weather Conditions: 57°F, Rainy	**Important Telephone Calls:**
Shaw Personnel On Site: Peter Helseth, P.E.	

FIELD ACTIVITY DAILY LOG

Shaw® Shaw Environmental, Inc.

Project Name: NYCSCA Metropolitan Avenue **Date:** 11/30/10
Field Activity Subject: SSDS Bi-Weekly Inspection
Description of Daily Activities and Events:

- 10:30 AM Shaw on site.

- I arrived on site and inspected the blower unit behind the school building. The blower unit was operating properly. The green light indicating normal performance was on.
- The gate to access the unit was unlocked, so I entered to inspect the inside of the blower unit. I lifted the exterior door off the unit and took photos of the instrumentation, see below. It appears that the contractor had installed the pressure gauges but I did not see a flow switch installed within the unit.

FIELD ACTIVITY DAILY LOG

Shaw® Shaw Environmental, Inc.

- The SCA project officer, Al Daub, was in a meeting but I did speak with him after the inspection and he will get back to me on the flow switch situation. The BMS for this school is not operational yet.
- The next inspection will be on Dec 14th.

- 11:00 AM Shaw off site.

Visitors on Site:	**Changes from Plans and Specifications and Other Special Orders and Important Decisions:**
Weather Conditions: 53°F, Rainy	**Important Telephone Calls:**
Shaw Personnel On Site: Peter Helseth, P.E.	

FIELD ACTIVITY DAILY LOG

Shaw® Shaw Environmental, Inc.

Project Name: NYCSCA Metropolitan Avenue **Date:** 12/14/10
Field Activity Subject: SSDS Bi-Weekly Inspection
Description of Daily Activities and Events:

- 9:30 AM Shaw on site.

- I arrived on site and inspected the blower unit behind the school building. The blower unit was operating properly. The green light indicating normal performance was on.
- The gate to access the unit was locked, so I went in the school to visit with Al Daub and ask about the flow switch.
- When Al arrived to his office, we reviewed the construction plans together. The environmental plans for this site specified a differential pressure gauge rather than a flow switch. The differential pressure gauge will be tied into the BMS system once it is operational. I was told the BMS system will not be active for quite some time.
- I also discussed with Al the indoor air quality sampling work proposed to be completed between Christmas and New Year's Day. Al confirmed the SCA work taking place in the school that week was "hammer and nail" items, not any painting. He didn't think there was anything that would interfere with our testing from a construction perspective.
- I mentioned to Al there had been complaints about odors from the water room in the basement where paints are stored. Al said that was an exaggeration and there were no odors from that area that would interfere with our testing.
- The next inspection will be on Dec 28th.

- 10:00 AM Shaw off site.

Visitors on Site:	**Changes from Plans and Specifications and Other Special Orders and Important Decisions:**
Weather Conditions: 28°F, Overcast	**Important Telephone Calls:**
Shaw Personnel On Site: Peter Helseth, P.E.	

FIELD ACTIVITY DAILY LOG

Shaw® Shaw Environmental, Inc.

Project Name: NYCSCA Metropolitan Avenue **Date:** 12/23/10
Field Activity Subject: SSDS Bi-Weekly Inspection
Description of Daily Activities and Events:

- 8:30 AM Shaw on site.

- I arrived on site and inspected the blower unit behind the school building. The blower unit was operating properly. The green light indicating normal performance was on.
- I entered the school to find the custodian Yanni after inspecting the fan. I wanted to confirm the indoor air quality sampling for next week on Monday, Tuesday, and Thursday. Yanni and I walked to Al Daub's SCA office to explain this schedule. I informed both Yanni and Al that no work involving chemicals, paints, or floor stripping could be performed during those days next week. They both were aware, and agreed.
- The next inspection will be on Jan 4th.

- 9:00 AM Shaw off site.

Visitors on Site:	**Changes from Plans and Specifications and Other Special Orders and Important Decisions:**
Weather Conditions: 32°F, Overcast	**Important Telephone Calls:**
Shaw Personnel On Site: Peter Helseth, P.E.	

FIELD ACTIVITY DAILY LOG

Shaw® Shaw Environmental, Inc.

Project Name: NYCSCA Metropolitan Avenue **Date:** 1/5/11
Field Activity Subject: SSDS Bi-Weekly Inspection
Description of Daily Activities and Events:

- 8:30 AM Shaw on site.
- I arrived on site and inspected the blower unit behind the school building. The blower unit was operating properly. The green light indicating normal performance was on.
- The next inspection will be on Jan 18th.
- 9:00 AM Shaw off site.

Visitors on Site:	**Changes from Plans and Specifications and Other Special Orders and Important Decisions:**
Weather Conditions: 36°F, Sunny	**Important Telephone Calls:**
Shaw Personnel On Site: Peter Helseth, P.E.	

FIELD ACTIVITY DAILY LOG

Shaw® Shaw Environmental, Inc.

Project Name: NYCSCA Metropolitan Avenue **Date:** 1/19/11
Field Activity Subject: SSDS Bi-Weekly Inspection
Description of Daily Activities and Events:

- 8:45 AM Shaw on site.
- I arrived on site and inspected the blower unit behind the school building. The blower unit was operating properly. The green light indicating normal performance was on.
- The next inspection will be on Feb 1st.
- 9:15 AM Shaw off site.

Visitors on Site:	**Changes from Plans and Specifications and Other Special Orders and Important Decisions:**
Weather Conditions: 44°F, Overcast	**Important Telephone Calls:**
Shaw Personnel On Site: Peter Helseth, P.E.	

FIELD ACTIVITY DAILY LOG

Shaw® Shaw Environmental, Inc.

Project Name: NYCSCA Metropolitan Avenue **Date:** 2/1/11
Field Activity Subject: SSDS Bi-Weekly Inspection
Description of Daily Activities and Events:

- 10:00 AM Shaw on site.
- I arrived on site and inspected the blower unit behind the school building. The blower unit was operating properly. The green light indicating normal performance was on.
- The next inspection will be on Feb 15th.
- 10:30 AM Shaw off site.

Visitors on Site:	**Changes from Plans and Specifications and Other Special Orders and Important Decisions:**
Weather Conditions: 22°F, Snowing	**Important Telephone Calls:**
Shaw Personnel On Site: Peter Helseth, P.E.	

FIELD ACTIVITY DAILY LOG

Shaw® Shaw Environmental, Inc.

Project Name: NYCSCA Metropolitan Avenue **Date:** 2/15/11
Field Activity Subject: SSDS Bi-Weekly Inspection
Description of Daily Activities and Events:

- 9:30 AM Shaw on site.
- I arrived on site and inspected the blower unit behind the school building. The blower unit was operating properly. The green light indicating normal performance was on.
- The next inspection will be on Mar 1st.
- 10:00 AM Shaw off site.

Visitors on Site:	**Changes from Plans and Specifications and Other Special Orders and Important Decisions:**
Weather Conditions: 29°F, Sunny	**Important Telephone Calls:**
Shaw Personnel On Site: Peter Helseth, P.E.	

FIELD ACTIVITY DAILY LOG

Shaw® Shaw Environmental, Inc.

Project Name: NYCSCA Metropolitan Avenue **Date:** 3/1/11
Field Activity Subject: SSDS Bi-Weekly Inspection
Description of Daily Activities and Events:

- 9:30 AM Shaw on site.

- I arrived on site and inspected the blower unit behind the school building. The blower unit was operating properly. The green light indicating normal performance was on.
- While performing my inspection, Yanni the custodian approached me to discuss the BMS. Yanni has been asking the SCA PO when the BMS will be installed for the project site. Yanni believes they plan on leaving the site without installing the BMS. He said on several occasions, they tried to tell him that the BMS was not their responsibility.
- Yanni and I then walked inside to talk the SCA officer. Al Daub was not present but we spoke with Preston Worsham. He told us that the BMS was probably weeks to a month away from being operational. We also asked about the status of the material that had been placed outside the fence of the project on the west side of the building, adjacent to the old railroad tracks. He said they were aware of that open item but were not going to do anything until the weather warmed this spring.
- I reminded Yanni I would be back on Mar 15th for my next inspection.

- 10:30 AM Shaw off site.

Visitors on Site:	**Changes from Plans and Specifications and Other Special Orders and Important Decisions:**
Weather Conditions: 46°F, Sunny	**Important Telephone Calls:**
Shaw Personnel On Site: Peter Helseth, P.E.	

FIELD ACTIVITY DAILY LOG

Shaw® Shaw Environmental, Inc.

Project Name: NYCSCA Metropolitan Avenue **Date:** 3/29/11
Field Activity Subject: SSDS Bi-Weekly Inspection
Description of Daily Activities and Events:

- 9:30 AM Shaw on site.
- I arrived on site and inspected the blower unit behind the school building. The blower unit was operating properly. The green light indicating normal performance was on.
- The next inspection will be on April 12th.
- 10:00 AM Shaw off site.

Visitors on Site:	**Changes from Plans and Specifications and Other Special Orders and Important Decisions:**
Weather Conditions: 40°F, Sunny	**Important Telephone Calls:**
Shaw Personnel On Site: Peter Helseth, P.E.	

FIELD ACTIVITY DAILY LOG

Shaw® Shaw Environmental, Inc.

Project Name: NYCSCA Metropolitan Avenue **Date:** 4/12/11
Field Activity Subject: SSDS Bi-Weekly Inspection
Description of Daily Activities and Events:

- 12:45 PM Shaw on site.
- I arrived on site and inspected the blower unit behind the school building. The blower unit was operating properly. The green light indicating normal performance was on.
- The next inspection will be on April 26th.
- 1:15 PM Shaw off site.

Visitors on Site:	**Changes from Plans and Specifications and Other Special Orders and Important Decisions:**
Weather Conditions: 55°F, Raining	**Important Telephone Calls:**
Shaw Personnel On Site: Peter Helseth, P.E.	

FIELD ACTIVITY DAILY LOG

Shaw® Shaw Environmental, Inc.

Project Name: NYCSCA Metropolitan Avenue **Date:** 4/26/11
Field Activity Subject: SSDS Bi-Weekly Inspection
Description of Daily Activities and Events:

- 11:15 AM Shaw on site.
- I arrived on site and inspected the blower unit behind the school building. The blower unit was operating properly. The green light indicating normal performance was on.
- The next inspection will be on May 10th.
- 11:45 AM Shaw off site.

Visitors on Site:	**Changes from Plans and Specifications and Other Special Orders and Important Decisions:**
Weather Conditions: 75°F, Sunny	**Important Telephone Calls:**
Shaw Personnel On Site: Peter Helseth, P.E.	

FIELD ACTIVITY DAILY LOG

Shaw® Shaw Environmental, Inc.

Project Name: NYCSCA Metropolitan Avenue **Date:** 5/10/11
Field Activity Subject: SSDS Bi-Weekly Inspection
Description of Daily Activities and Events:

- 10:30 AM Shaw on site.
- I arrived on site and inspected the blower unit behind the school building. The blower unit was operating properly. The green light indicating normal performance was on.
- The next inspection will be on May 24th.
- 11:00 AM Shaw off site.

Visitors on Site:	**Changes from Plans and Specifications and Other Special Orders and Important Decisions:**
Weather Conditions: 68°F, Sunny	**Important Telephone Calls:**
Shaw Personnel On Site: Peter Helseth, P.E.	

FIELD ACTIVITY DAILY LOG

Shaw® Shaw Environmental, Inc.

Project Name: NYCSCA Metropolitan Avenue **Date:** 5/24/11
Field Activity Subject: SSDS Bi-Weekly Inspection
Description of Daily Activities and Events:

- 9:30 AM Shaw on site.

- I arrived on site and inspected the blower unit behind the school building. The blower unit was operating properly. The green light indicating normal performance was on.
- The next inspection will be on May 24th.
- I was also on site to meet with the controls contractor to inspect the front end of the BMS.
- We opened the blower enclosure to inspect the newly installed differential pressure gauge. The gauge was reading approximately -3.50 inches of water column. When we disconnected the gauge tubes from the blower unit, the reading remained the same.
- We recalibrated the differential gauge pressure. We then turned on the blower unit and read a value of approximately -0.50 inches of water column. Again, we disconnected the gauge tubes from the blower unit and the reading remained the same.
- At the same time of testing this differential pressure gauge, other previously installed gauges were reading negative pressure in the blower duct work
- We called Dwyer Instruments technical help line to trouble shoot our problems with their gauge. After following all of their steps, we continued to have problems with the gauge. We gave our information to the tech guy and asked if a local representative from their company could contact us to arrange a site visit.
- Since the gauge was not functioning, we were unable to complete the computer programming of the BMS system.
- I informed the SCA PO, Al Daub, of the circumstances and told him we would redo the inspection when an individual from Dwyer could attend.

- 11:30 AM Shaw off site.

Visitors on Site:	**Changes from Plans and Specifications and Other Special Orders and Important Decisions:**
Weather Conditions: 80°F, Sunny	**Important Telephone Calls:**
Shaw Personnel On Site: Peter Helseth, P.E.	

FIELD ACTIVITY DAILY LOG

Shaw® Shaw Environmental, Inc.

Project Name: NYCSCA Metropolitan Avenue **Date:** 6/7/11
Field Activity Subject: SSDS Bi-Weekly Inspection
Description of Daily Activities and Events:

- 9:30 AM Shaw on site.

- David Greffenius and I arrived on site to inspect the blower unit behind the school building. The blower unit was operating properly. The green light indicating it is on was not lit today and the switch for the blower was in the Auto position.
- We met with one of the custodian's assistant, Mike, and informed him that the blower should be switched into the Hand position. He explained he would get the key from Yanni, the head custodian, and move the switch after discussing with Yanni.
- We reminded Mike that we would return on June 21st for another inspection.

- 10:00 AM Shaw off site.

Visitors on Site:	**Changes from Plans and Specifications and Other Special Orders and Important Decisions:**
Weather Conditions: 78°F, Sunny	**Important Telephone Calls:**
Shaw Personnel On Site: Peter Helseth, P.E.	

FIELD ACTIVITY DAILY LOG

Project Name: NYCSCA Metropolitan Avenue **Date:** 6/21/11

Field Activity Subject: SSDS Bi-Weekly Inspection

Description of Daily Activities and Events:

The system was operating properly during the inspection. (It was discovered that the blower switch will not stay on manual, but must be on Auto.) The manufacturer's warranty has not been received, and still waiting on an independent PE certification of the SSDS components. SSDS has been connected to BMS to monitor fan current. Contractor will change system to monitor flow. BMS graphical display not operational.

Visitors on Site:	**Changes from Plans and Specifications and Other Special Orders and Important Decisions:**
Weather Conditions: 70^{o}F, Clear	
	Important Telephone Calls:
Shaw Personnel On Site: David Greffenius	

FIELD ACTIVITY DAILY LOG

Project Name: NYCSCA Metropolitan Avenue **Date:** 7/6/11

Field Activity Subject: SSDS Bi-Weekly Inspection

Description of Daily Activities and Events:

The system was operating properly during the inspection. Met PO Joe Mazzucco on site, who said a pressure differential switch had been installed on the SSDS. BMS to monitor pressure differential pending IEH & architect approval.

Visitors on Site:	**Changes from Plans and Specifications and Other Special Orders and Important Decisions:**
Weather Conditions:	
Shaw Personnel On Site: David Greffenius	**Important Telephone Calls:**

FIELD ACTIVITY DAILY LOG

Project Name: NYCSCA Metropolitan Avenue **Date:** 7/22/11
Field Activity Subject: SSDS Bi-Weekly Inspection
Description of Daily Activities and Events:

The system was operating properly during the inspection.

Visitors on Site:	**Changes from Plans and Specifications and Other Special Orders and Important Decisions:**
Weather Conditions:	
	Important Telephone Calls:
Shaw Personnel On Site: David Greffenius	

FIELD ACTIVITY DAILY LOG

Project Name: NYCSCA Metropolitan Avenue **Date:** 8/4/11
Field Activity Subject: SSDS Bi-Weekly Inspection
Description of Daily Activities and Events:

The system was operating properly during the inspection.

Visitors on Site:	**Changes from Plans and Specifications and Other Special Orders and Important Decisions:**
Weather Conditions:	
	Important Telephone Calls:
Shaw Personnel On Site: David Greffenius	

FIELD ACTIVITY DAILY LOG

Project Name: NYCSCA Metropolitan Avenue **Date:** 8/22/11
Field Activity Subject: SSDS Bi-Weekly Inspection
Description of Daily Activities and Events:

The system was operating properly during the inspection.

Visitors on Site:	**Changes from Plans and Specifications and Other Special Orders and Important Decisions:**
Weather Conditions:	
	Important Telephone Calls:
Shaw Personnel On Site: David Greffenius	

FIELD ACTIVITY DAILY LOG

Project Name: NYCSCA Metropolitan Avenue **Date:** 9/1/11
Field Activity Subject: SSDS Bi-Weekly Inspection
Description of Daily Activities and Events:

The system was operating properly during the inspection.

Visitors on Site:	**Changes from Plans and Specifications and Other Special Orders and Important Decisions:**
Weather Conditions:	
Shaw Personnel On Site: David Greffenius	**Important Telephone Calls:**

FIELD ACTIVITY DAILY LOG

Project Name: NYCSCA Metropolitan Avenue **Date:** 9/19/11
Field Activity Subject: SSDS Bi-Weekly Inspection
Description of Daily Activities and Events:

The system was operating properly during the inspection.

Visitors on Site:	**Changes from Plans and Specifications and Other Special Orders and Important Decisions:**
Weather Conditions:	
Shaw Personnel On Site: David Greffenius	**Important Telephone Calls:**

FIELD ACTIVITY DAILY LOG

Project Name: NYCSCA Metropolitan Avenue **Date:** 10/26/11
Field Activity Subject: SSDS Bi-Weekly Inspection
Description of Daily Activities and Events:

- 11:35 hrs NYCSCA representative S. Kline and consultant J. Pena (Shaw) on site.
- Met with the SCA Project Officer Joe Mazzucco and the school Custodian Yanni Gatatuls in SCA field office.
- The gate to access the unit was locked. The custodian unlocked the gate to the blower unit located west of the school building.
- The blower unit was operating properly. The green light indicating normal performance was on.
- Digital pressure gauge with transmitter (Dwyer DM-2000) installed and attached to the exhaust side of blower reads 1.1 inches of water column.
- We returned to the custodian's office to let the custodian know the blower was operating properly. The custodian confirmed that the Building Management System (BMS) computer has not been set up yet.
- Informed the custodian that S. Kline would be taking over for D. Greffenius for routine SSDS inspections and that the next one was scheduled in approximately two weeks.
- 12:45 hrs. S. Kline and J. Pena off site.

Visitors on Site: Jaime Pena (Shaw Group)	**Changes from Plans and Specifications and Other Special Orders and Important Decisions:**
Weather Conditions: Overcast Low 60s	**Important Telephone Calls:**
NYCSCA Personnel On Site: Stephen M. Kline	

FIELD ACTIVITY DAILY LOG

Project Name: NYCSCA Metropolitan Avenue **Date:** 11/10/11
Field Activity Subject: SSDS Bi-Weekly Inspection
Description of Daily Activities and Events:

- 14:10 hrs NYCSCA representative S. Kline on site.
- Met with the SCA Project Officer Joe Mazzucco and the school Custodian Yanni Gatatuls in SCA field office. BMS is not set up but currently being worked on by Temperature Controls Contractor (TCC).
- Met with the TCC representative J. Rodgers in the server room of the school. J. Rodgers demonstrated the connection of the SSDS digital pressure switch to the BMS and the "system off" alarm and "low pressure" set points.
- The gate to access the unit was locked. The custodian unlocked the gate to the blower unit located west of the school building.
- The blower unit was operating properly. The green light indicating normal performance was on.
- Digital pressure gauge with transmitter installed on the exhaust side of blower reads 1.15 inches of water column.
- We returned to the custodian's office to let the custodian know the blower was operating properly.
- Informed the custodian that next SSDS inspection is scheduled in approximately two weeks.
- 15:45 hrs. S. Kline off site.

Visitors on Site: Jeff Rodgers TSBA	**Changes from Plans and Specifications and Other Special Orders and Important Decisions:**
Weather Conditions: Sunny upper 60s	
NYCSCA Personnel On Site: Stephen M. Kline	**Important Telephone Calls:**

FIELD ACTIVITY DAILY LOG

Project Name: NYCSCA Metropolitan Avenue **Date:** 11/22/11
Field Activity Subject: SSDS Bi-Weekly Inspection
Description of Daily Activities and Events:

- 10:00 hrs NYCSCA representative S. Kline on site.
- Met with the school Custodian Yanni Gatatuls in SCA field office. BMS is not set up but commissioning is in process.
- The gate to access the unit was locked. The custodian unlocked the gate to the blower unit located west of the school building.
- The blower unit was operating properly. The green light indicating normal performance was on.
- Digital pressure gauge with transmitter installed on the exhaust side of blower reads 1.1 inches of water column.
- We returned to the custodian's office to let the custodian know the blower was operating properly.
- Informed the custodian that next SSDS inspection is scheduled in approximately two weeks.
- 10:45 hrs. S. Kline off site.

Visitors on Site:	**Changes from Plans and Specifications and Other Special Orders and Important Decisions:**
Weather Conditions: Sunny cool 50s	
NYCSCA Personnel On Site: Stephen M. Kline	**Important Telephone Calls:**

FIELD ACTIVITY DAILY LOG

Project Name: NYCSCA Metropolitan Avenue **Date:** 12/16/11
Field Activity Subject: SSDS Bi-Weekly Inspection
Description of Daily Activities and Events:

- 11:00 hrs NYCSCA representative S. Kline on site.
- Met with the SCA Project Officer Joe Mazzucco and the school Custodian Yanni Gatatuls in SCA field office. BMS set up is not complete.
- The custodian provided access to the blower unit located west of the school building.
- The blower unit was operating properly. The green light indicating normal performance was on. When system is turned off and on red indicator light is burned out.
- Digital pressure gauge with transmitter installed on the exhaust side of blower reads 1.1 inches of water column.
- We returned to the custodian's office to let the custodian know the blower was operating properly. Mentioned replacement of the red indicator light.
- Informed the custodian that next SSDS inspection is scheduled in January 2012.
- 11:45 hrs. S. Kline off site.

Visitors on Site:	**Changes from Plans and Specifications and Other Special Orders and Important Decisions:**
Weather Conditions: Sunny mid 40s	
NYCSCA Personnel On Site: Stephen M. Kline	**Important Telephone Calls:**

FIELD ACTIVITY DAILY LOG

Project Name: NYCSCA Metropolitan Avenue **Date:** 01/11/12
Field Activity Subject: SSDS Bi-Weekly Inspection
Description of Daily Activities and Events:

- 10:30 hrs NYCSCA representatives S. Kline and A. Rubino on site.
- Met with the school Custodian Yanni Gatatuls in SCA field office. BMS set up is not complete.
- The custodian provided access to the blower unit located west of the school building.
- The blower unit was operating properly. The green light indicating normal performance was on. When system is turned off and on red indicator light is burned out.
- Digital pressure gauge with transmitter installed on the exhaust side of blower reads 1.8 inches of water column.
- We returned to the custodian's office to let the custodian know the blower was operating properly.
- Informed the custodian that next SSDS inspection is scheduled in approximately 2 weeks.
- 11:00 hrs. S. Kline off site.

Visitors on Site: Anna Rubino - NYCSCA	**Changes from Plans and Specifications and Other Special Orders and Important Decisions:**
Weather Conditions: Sunny mid 40s	**Important Telephone Calls:**
NYCSCA Personnel On Site: Stephen M. Kline	

FIELD ACTIVITY DAILY LOG

Project Name: NYCSCA Metropolitan Avenue **Date:** 01/31/12
Field Activity Subject: SSDS Bi-Weekly Inspection
Description of Daily Activities and Events:

- 10:00 hrs NYCSCA representatives S. Kline on site.
- Met with the school Project Officer C. Preston Worsham and school Custodian Yanni Gatatuls in SCA field office. BMS set up is not complete, but TCC contractor is onsite and working on it.
- The custodian provided access to the blower unit located west of the school building.
- The blower unit was operating properly. The green light indicating normal performance was on. When system is turned off and on red indicator light is burned out.
- Digital pressure gauge with transmitter installed on the exhaust side of blower reads 0.9 inches of water column.
- We returned to the SCA project office to let the PO know the blower was operating properly.
- Informed the PO that next SSDS inspection is scheduled in approximately 2 weeks.
- 11:00 hrs. S. Kline off site.

Visitors on Site:	**Changes from Plans and Specifications and Other Special Orders and Important Decisions:**
Weather Conditions: Sunny mid 40s	
NYCSCA Personnel On Site: Stephen M. Kline	**Important Telephone Calls:**

1430 Broadway
10th Floor
New York, NY 10018

212.221.7822 PHONE
212.221.7840 FAX

www.TRCsolutions.com

FIELD ACTIVITY DAILY LOG

Date: 2/29/12
Project Name: NYCSCA Metropolitan High School
Field Activity Subject: SSDS Bi-Weekly Inspection
Description of Daily Activities and Events:

- S. Kline (SCA IEH) and K. Boger (TRC) on-site.

- Checked in with custodian's office to sign in.

- Met with the project officer (PO), Preston Worsham, to discuss outstanding issues regarding the SSDS installation. S. Kline informed the PO of outstanding issues.

-TRC and SCA inspected the SSDS suction fan and determined that it was operating normally.

- Informed the PO that K. Boger would be taking over for S. Kline for routine SSDS inspections and that the next one was scheduled in approximately two weeks.

Attachment 6
Photographic Documentation

Photo 1: View of the SSDS fan unit housing.

Photo 2: View of SSDS fan unit observed on March 6, 2012.

Photo 3: View of spare SSDS fan unit delivered on March 12, 2012.

Photo 4: View of SSDS vacuum gauge.

Photo 5: View of sealed crack in Room 0021.

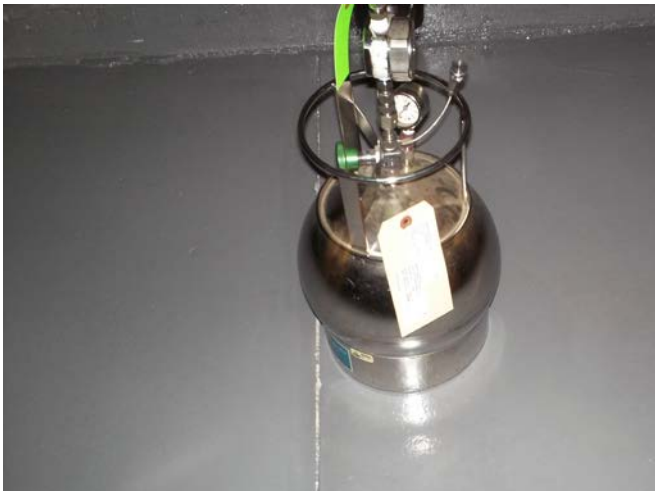


Photo 6: View of summa canister in Room 0021.

Photo 7: View of tennis court cover.

Photo 8: View of artificial turf on baseball field.

Photo 9: View of typical sidewalk pavers.

Photo 10: View of typical concrete sidewalk and vegetation cover.

Attachment 7
Annual Inspection Form

Annual Inspection Form

Metropolitan Avneue - 167Q (Q686)

Inspector's Name: Gilbert Gedeon
Weather Conditions: Sunny / Clear
Inspection Date: 3/6/12
Air Temperature (°F): 42 of 5
Inspection Time: 10 AM
Comments:

A. PRE INSPECTION CHECKLIST

* Schedule Annual Inspection when school is not occupied by students.
* Review 12 Previous Monthly Inspection Checklists. ✓ (18 months)
* Meet with Custodian and Principal to solicit comments/concerns regarding the operation of the Engineering Controls over the last 12 months. ✓ (18 months)
* Conduct Annual Refresher Training with DOE EHS.
* Comments: Not all Monthly Inspection forms completed.

B. SSDS SYSTEM INSPECTION - Inspect Interior and Exterior of Blower Enclosure

* Any rust or other debris in the vicinity of the post, sleeve and discharge cap at the SSDS stack vent? No
* Any rust or other debris in the vicinity of the inline filter/bird screen? No
* Is the SSDS blower unit functioning properly and is the spare blower unit available? Yes, no spare
* Is the inline filter differential pressure guage functioning properly? Yes
* Is the blower inlet vacuum indicator functioning properly? Yes
* Are the blower outlet pressure guage and temperature guage functioning properly? Yes
* Is the discharge flow element functioning properly? Yes
* Is the dilution air intake functioning properly? Yes
* Are the indicator lights on the BMS panel functioning properly? Not connected at time of inspection
* Comments (see or hear anything unusual?): BMS not installed; spare fan unit on order.

C. BASEMENT INSPECTION - Walk Entire Basement Floor

* Review all cracks or other openings indentified in ground floors during previous inspections. ✓
* Any new visible cracks in the basement floor? No
* Any new visible cracks in the basement walls? No
* Any new visible opening (unintended) in either the floor or walls? No
* Any new visible cracks in elevator pit or other accessible pits? No
* Note the length of any new cracks/openings in the basement floor. N/A
* Note the length of any new cracks/openings in the basement walls. N/A
* Draw approximate location of floor cracks/openings that appear to have potential leak through vapor barrier. N/A

Comments: Summa Canisters in School; Room 021 crack is sealed

D. EXTERIOR INSPECTION - Walk Entire Exterior Property

* Are there any significant cracks or deterioration of the paved areas? NO
* Has there been any removal of any pavement? NO
* Is there any soil washing or erosion (gullies, soil washed out onto the pavement)? NO
* Has there been any vehicular use on the unpaved areas (tire tracks, rutting)? NO
* Have any structures been constructed on the unpaved areas? NO
* Are there any signs of intrusive activities? NO

Comments: cracks have been sealed and repaired

D. Repair

Summarize needed/completed repairs to Engineering Controls: 1. BMS installation needed. 2. Room 021 cracks sealed. 3. Exterior cracks sealed and repaired.

Inspector's Signature:

Attachment 8
Summa Sampling Laboratory Results

ATC ASSOCIATES INC.
Environmental, Geotechnical and Materials Engineers

104 E. 25th St, 10th Floor
New York, NY 10010-2917
www.atcassociates.com
(212) 353-8280
(212) 353-8306 Fax

March 9, 2012 R 3.16.12

Mr. Bernard P. Orlan
Director, Environmental Health and Safety
New York City Department of Education
44-36 Vernon Boulevard
Long Island City, NY 11101

Re: Air Sampling for Volatile Organic Compounds
Metropolitan H.S. (Q686)
9130 Metropolitan Avenue
Rego Park, NY 11374
ATC Project No. 15-19125-1354

Dear Mr. Orlan:

ATC Associates, Inc. (ATC) performed indoor air quality testing on March 06, 2012 at Metropolitan H.S. (Q686) located at 9130 Metropolitan Avenue, Rego Park, New York, 11374. This testing was performed at the request of the New York State Department of Environmental Conservation (NYSDEC) pursuant to their letter of January 5, 2012, and was completed following sealing of the floor crack observed in Room 21 of the school. Mr. Wagdi Abdelshahid, Industrial Hygienist from ATC's New York City office conducted the sampling.

SCOPE OF WORK

ATC collected a total of four (4) indoor air samples and one (1) outdoor air sample (total of 5 samples) for volatile organic compounds (VOCs) using Summa canisters Basement samples were taken in Room 21 where the crack in the floor was located. An additional sample was taken in the basement in the adjacent Room 5. Samples were taken on the 1st floor directly above Room 21 in Room 1001 and also in an adjacent area of the "1st floor Main Entrance". Sampling was conducted in accordance with New York State Department of Health (DOH) document "Guidance for Evaluating Soil Vapor Intrusion in the State of New York", October 2006

The canisters were supplied and samples analyzed by ALPHA Analytical Laboratory, a New York State NELAP-approved laboratory (Lab ID #11627) located at 320 Forbes Blvd. Mansfield, MA 02048. The canisters were supplied with flow controllers calibrated by the laboratory to sample for eight hours. Analysis was performed according to EPA Method TO-15 (Volatile Organic) and samples were re-analyzed for trichloroethylene (TCE) and tetrachloroethene (PCE) using the laboratory's low level TO-15 method.

As reported by the certified laboratory, ALPHA Analytical Laboratory summa canisters are cleaned in a batch mode (as many as 10 canisters on a manifold at a time) and each canister is certified on an individual basis. Each canister goes through a pressure check to assure the canister does not leak and each canister is analyzed to ensure there are no VOC's present after the cleaning. Five (5)

canisters were used for this sampling. Vacuum readings were recorded before starting and after sampling from each individual canister's flow controller. In addition each individual flow controller identification number was recorded along with all other pertinent information on the chain of custody that is found with the sample results.

RESULTS

The air in each canister was analyzed for a panel of forty-five (45) specific volatile organic compounds. Table 1 summarizes the sampling locations and detectable analytes in each of the samples collected. All of the results are in concentrations of micrograms per cubic meter ($\mu g/m^3$) and all detections were below DOH Air Guideline Values (AGVs) and below the range of anticipated background concentrations.

TABLE 1
AIRBORNE CONCENTRATIONS
OF DETECTED VOLATILE ORGANTIC COMPOUNDS

	Concentrations / Micrograms per cubic Meter ($\mu g/m^3$)				
	Locations				
Analytes	Outdoors	Basement Room 21	Basement Room 05	1st floor Room 1001	1st floor Main Entrance P233
Dichlorodifluoromethane	2.22	2.32	2.25	2.19	2.17
Chloromethane	ND	ND	ND	1.10	1.09
1,3-Butadiene	0.058	0.044	0.053	0.058	0.049
Trichlorofluoromethane	1.12	1.24	1.20	1.10	1.16
1,2,3-Trichloro-1,2,2 trifloroethane	0.598	0.506	0.475	0.444	0.582
Cloroform	ND	ND	2.91	0.102	ND
Benzene	0.645	0.597	0.597	0.604	0.722
Carbon tetrachloride	0.428	0.510	0.453	0.415	0.453
Bromodichloromethane	ND	ND	0.194	ND	ND
Toluene	1.13	0.874	1.16	1.64	2.14
Tetrachloroethene	0.237	0.258	0.285	0.420	0.319
Ethylbenzene	0.178	0.143	1.78	0.512	0.269
p/m-Xylene	0.521	0.400	6.73	0.873	0.804
Styrene	ND	0.315	0.119	0.128	ND
o-Xylene	0.191	0.143	2.15	0.339	0.274
1,3,5-Trimethylbenzene	ND	ND	0.128	0.133	ND
1,2,4-Trimethylbenzene	0.172	0.133	0.324	0.438	0.256
1,4-Dichlorobenzene	ND	ND	ND	0.156	0.126

*ND = Not Detected

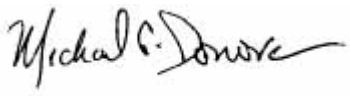
CONCLUSION

The results of the indoor air quality investigation indicated that the detected VOCs were below AGVs and below the anticipated range of background concentrations. There is no evidence of vapor intrusion at the school.

A copy of the analytical laboratory report listing concentrations of all of the compounds in the analyte panel for each sample collected, laboratory quality control protocols and the associated chain-of-custody form are included in the Attachment to this report. Should you have any questions or require additional information regarding these samples, please do not hesitate to contact us at (212) 353-8280.

Sincerely,
ATC Associates, Inc.

Reviewed by:



Wagdi Abdelshahid
Industrial Hygienist

Michael Donovan, CIH
Field Operation Manager

Attachment A: Summa Canister Results

Attachment B: DOEWO

ATTACHMENT A

SUMMA CANISTER RESULTS
Metropolitan H.S. (Q686)
March 9, 2012

ANALYTICAL REPORT

Lab Number:	L1203929
Client:	ATC Associates, Inc 104 East 25th Street 10th Floor New York, NY USA
ATTN:	Mike Donovan
Phone:	(212) 353-8280
Project Name:	METROPOLITAN H.S (Q686)
Project Number:	015.19125.1354
Report Date:	03/09/12

Certifications & Approvals: NY (11627), CT (PH-0141), NH (2206), NJ NELAP (MA015), RI (LAO00299), PA (68-02089), LA NELAP (03090), FL (E87814), TX (T104704419), WA (C954), DOD (L2217.01), USDA (Permit #P330-11-00109), US Army Corps of Engineers.

320 Forbes Boulevard, Mansfield, MA 02048-1806
508-822-9300 (Fax) 508-822-3288 800-624-9220 - www.alphalab.com

Project Name: METROPOLITAN H.S (Q686)
Project Number: 015.19125.1354

Lab Number: L1203929
Report Date: 03/09/12

Alpha Sample ID	Client ID	Sample Location	Collection Date/Time
L1203929-01	OUTDOOR	QUEENS, NY	03/06/12 18:40
L1203929-02	ROOM 21	QUEENS, NY	03/06/12 18:50
L1203929-03	ROOM 05	QUEENS, NY	03/06/12 19:00
L1203929-04	ROOM 1001	QUEENS, NY	03/06/12 19:03
L1203929-05	MAIN ENT. P233	QUEENS, NY	03/06/12 19:11

Project Name: METROPOLITAN H.S (Q686) **Lab Number:** L1203929
Project Number: 015.19125.1354 **Report Date:** 03/09/12

Case Narrative

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

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet all of the requirements of NELAC, for all NELAC accredited parameters. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. Performance criteria for CAM and RCP methods allow for some LCS compound failures to occur and still be within method compliance. In these instances, the specific failures are not narrated but are noted in the associated QC table. This information is also incorporated in the Data Usability format for our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

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

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

Volatile Organics in Air

Canisters were released from the laboratory on February 29, 2012.

The canister certification results are provided as an addendum.

L1203929-02, -04 and -05 results for Chloromethane should be considered estimated due to co-elution with a non-target peak.

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

Authorized Signature:  Christopher J. Anderson

Title: Technical Director/Representative Date: 03/09/12

AIR

Project Name: METROPOLITAN H.S (Q686)
Project Number: 015.19125.1354
Lab Number: L1203929
Report Date: 03/09/12

SAMPLE RESULTS

Lab ID: L1203929-01
Client ID: OUTDOOR
Sample Location: QUEENS, NY
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 03/08/12 18:12
Analyst: MB

Date Collected: 03/06/12 18:40
Date Received: 03/07/12
Field Prep: Not Specified

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air by SIM - Mansfield Lab								
Dichlorodifluoromethane	0.450	0.050	--	2.22	0.247	--		1
Chloromethane	ND	0.500	--	ND	1.03	--		1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.050	--	ND	0.349	--		1
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,3-Butadiene	0.026	0.020	--	0.058	0.044	--		1
Bromomethane	ND	0.020	--	ND	0.078	--		1
Chloroethane	ND	0.020	--	ND	0.053	--		1
Trichlorofluoromethane	0.199	0.050	--	1.12	0.281	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Methylene chloride	ND	1.00	--	ND	3.47	--		1
1,1,2-Trichloro-1,2,2-Trifluoroethane	0.078	0.050	--	0.598	0.383	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
Methyl tert butyl ether	ND	0.020	--	ND	0.072	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Chloroform	ND	0.020	--	ND	0.098	--		1
1,2-Dichloroethane	ND	0.020	--	ND	0.081	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Benzene	0.202	0.100	--	0.645	0.319	--		1
Carbon tetrachloride	0.068	0.020	--	0.428	0.126	--		1
1,2-Dichloropropane	ND	0.020	--	ND	0.092	--		1
Bromodichloromethane	ND	0.020	--	ND	0.134	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
cis-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1

Project Name: METROPOLITAN H.S (Q686) ***Lab Number:*** L1203929

Project Number: 015.19125.1354 ***Report Date:*** 03/09/12

SAMPLE RESULTS

Lab ID: L1203929-01 Date Collected: 03/06/12 18:40

Client ID: OUTDOOR Date Received: 03/07/12

Sample Location: QUEENS, NY Field Prep: Not Specified

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Lab								
trans-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Toluene	0.299	0.050	--	1.13	0.188	--		1
Dibromochloromethane	ND	0.020	--	ND	0.170	--		1
1,2-Dibromoethane	ND	0.020	--	ND	0.154	--		1
Tetrachloroethene	0.035	0.020	--	0.237	0.136	--		1
1,1,1,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
Chlorobenzene	ND	0.020	--	ND	0.092	--		1
Ethylbenzene	0.041	0.020	--	0.178	0.087	--		1
p/m-Xylene	0.120	0.040	--	0.521	0.174	--		1
Bromoform	ND	0.020	--	ND	0.207	--		1
Styrene	ND	0.020	--	ND	0.085	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
o-Xylene	0.044	0.020	--	0.191	0.087	--		1
1,3,5-Trimethylbenzene	ND	0.020	--	ND	0.098	--		1
1,2,4-Trimethylbenzene	0.035	0.020	--	0.172	0.098	--		1
1,3-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
1,4-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
1,2-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
1,2,4-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Hexachlorobutadiene	ND	0.050	--	ND	0.533	--		1

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-difluorobenzene	86		60-140
bromochloromethane	93		60-140
chlorobenzene-d5	86		60-140

Project Name: METROPOLITAN H.S (Q686)
Project Number: 015.19125.1354
Lab Number: L1203929
Report Date: 03/09/12

SAMPLE RESULTS

Lab ID: L1203929-02
Client ID: ROOM 21
Sample Location: QUEENS, NY
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 03/08/12 18:49
Analyst: MB

Date Collected: 03/06/12 18:50
Date Received: 03/07/12
Field Prep: Not Specified

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air by SIM - Mansfield Lab								
Dichlorodifluoromethane	0.470	0.050	--	2.32	0.247	--		1
Chloromethane	ND	0.500	--	ND	1.03	--		1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.050	--	ND	0.349	--		1
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,3-Butadiene	0.020	0.020	--	0.044	0.044	--		1
Bromomethane	ND	0.020	--	ND	0.078	--		1
Chloroethane	ND	0.020	--	ND	0.053	--		1
Trichlorofluoromethane	0.220	0.050	--	1.24	0.281	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Methylene chloride	ND	1.00	--	ND	3.47	--		1
1,1,2-Trichloro-1,2,2-Trifluoroethane	0.066	0.050	--	0.506	0.383	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
Methyl tert butyl ether	ND	0.020	--	ND	0.072	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Chloroform	ND	0.020	--	ND	0.098	--		1
1,2-Dichloroethane	ND	0.020	--	ND	0.081	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Benzene	0.187	0.100	--	0.597	0.319	--		1
Carbon tetrachloride	0.081	0.020	--	0.510	0.126	--		1
1,2-Dichloropropane	ND	0.020	--	ND	0.092	--		1
Bromodichloromethane	ND	0.020	--	ND	0.134	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
cis-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1

Project Name: METROPOLITAN H.S (Q686) ***Lab Number:*** L1203929

Project Number: 015.19125.1354 ***Report Date:*** 03/09/12

SAMPLE RESULTS

Lab ID: L1203929-02 Date Collected: 03/06/12 18:50

Client ID: ROOM 21 Date Received: 03/07/12

Sample Location: QUEENS, NY Field Prep: Not Specified

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Lab								
trans-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Toluene	0.232	0.050	--	0.874	0.188	--		1
Dibromochloromethane	ND	0.020	--	ND	0.170	--		1
1,2-Dibromoethane	ND	0.020	--	ND	0.154	--		1
Tetrachloroethene	0.038	0.020	--	0.258	0.136	--		1
1,1,1,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
Chlorobenzene	ND	0.020	--	ND	0.092	--		1
Ethylbenzene	0.033	0.020	--	0.143	0.087	--		1
p/m-Xylene	0.092	0.040	--	0.400	0.174	--		1
Bromoform	ND	0.020	--	ND	0.207	--		1
Styrene	0.074	0.020	--	0.315	0.085	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
o-Xylene	0.033	0.020	--	0.143	0.087	--		1
1,3,5-Trimethylbenzene	ND	0.020	--	ND	0.098	--		1
1,2,4-Trimethylbenzene	0.027	0.020	--	0.133	0.098	--		1
1,3-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
1,4-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
1,2-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
1,2,4-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Hexachlorobutadiene	ND	0.050	--	ND	0.533	--		1

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-difluorobenzene	76		60-140
bromochloromethane	89		60-140
chlorobenzene-d5	85		60-140

Project Name: METROPOLITAN H.S (Q686) **Lab Number:** L1203929

Project Number: 015.19125.1354 **Report Date:** 03/09/12

SAMPLE RESULTS

Lab ID: L1203929-03
Client ID: ROOM 05
Sample Location: QUEENS, NY
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 03/08/12 19:27
Analyst: MB

Date Collected: 03/06/12 19:00
Date Received: 03/07/12
Field Prep: Not Specified

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Lab								
Dichlorodifluoromethane	0.456	0.050	--	2.25	0.247	--		1
Chloromethane	ND	0.500	--	ND	1.03	--		1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.050	--	ND	0.349	--		1
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,3-Butadiene	0.024	0.020	--	0.053	0.044	--		1
Bromomethane	ND	0.020	--	ND	0.078	--		1
Chloroethane	ND	0.020	--	ND	0.053	--		1
Trichlorofluoromethane	0.213	0.050	--	1.20	0.281	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Methylene chloride	ND	1.00	--	ND	3.47	--		1
1,1,2-Trichloro-1,2,2-Trifluoroethane	0.062	0.050	--	0.475	0.383	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
Methyl tert butyl ether	ND	0.020	--	ND	0.072	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Chloroform	0.596	0.020	--	2.91	0.098	--		1
1,2-Dichloroethane	ND	0.020	--	ND	0.081	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Benzene	0.187	0.100	--	0.597	0.319	--		1
Carbon tetrachloride	0.072	0.020	--	0.453	0.126	--		1
1,2-Dichloropropane	ND	0.020	--	ND	0.092	--		1
Bromodichloromethane	0.029	0.020	--	0.194	0.134	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
cis-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1

Project Name: METROPOLITAN H.S (Q686) **Lab Number:** L1203929

Project Number: 015.19125.1354 **Report Date:** 03/09/12

SAMPLE RESULTS

Lab ID: L1203929-03 Date Collected: 03/06/12 19:00

Client ID: ROOM 05 Date Received: 03/07/12

Sample Location: QUEENS, NY Field Prep: Not Specified

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air by SIM - Mansfield Lab								
trans-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Toluene	0.309	0.050	--	1.16	0.188	--		1
Dibromochloromethane	ND	0.020	--	ND	0.170	--		1
1,2-Dibromoethane	ND	0.020	--	ND	0.154	--		1
Tetrachloroethene	0.042	0.020	--	0.285	0.136	--		1
1,1,1,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
Chlorobenzene	ND	0.020	--	ND	0.092	--		1
Ethylbenzene	0.410	0.020	--	1.78	0.087	--		1
p/m-Xylene	1.55	0.040	--	6.73	0.174	--		1
Bromoform	ND	0.020	--	ND	0.207	--		1
Styrene	0.028	0.020	--	0.119	0.085	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
o-Xylene	0.496	0.020	--	2.15	0.087	--		1
1,3,5-Trimethylbenzene	0.026	0.020	--	0.128	0.098	--		1
1,2,4-Trimethylbenzene	0.066	0.020	--	0.324	0.098	--		1
1,3-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
1,4-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
1,2-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
1,2,4-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Hexachlorobutadiene	ND	0.050	--	ND	0.533	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	84		60-140
bromochloromethane	91		60-140
chlorobenzene-d5	85		60-140

Project Name: METROPOLITAN H.S (Q686) **Lab Number:** L1203929

Project Number: 015.19125.1354 **Report Date:** 03/09/12

SAMPLE RESULTS

Lab ID: L1203929-04
Client ID: ROOM 1001
Sample Location: QUEENS, NY
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 03/08/12 20:40
Analyst: MB

Date Collected: 03/06/12 19:03
Date Received: 03/07/12
Field Prep: Not Specified

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air by SIM - Mansfield Lab								
Dichlorodifluoromethane	0.443	0.050	--	2.19	0.247	--		1
Chloromethane	0.535	0.500	--	1.10	1.03	--		1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.050	--	ND	0.349	--		1
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,3-Butadiene	0.026	0.020	--	0.058	0.044	--		1
Bromomethane	ND	0.020	--	ND	0.078	--		1
Chloroethane	ND	0.020	--	ND	0.053	--		1
Trichlorofluoromethane	0.195	0.050	--	1.10	0.281	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Methylene chloride	ND	1.00	--	ND	3.47	--		1
1,1,2-Trichloro-1,2,2-Trifluoroethane	0.058	0.050	--	0.444	0.383	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
Methyl tert butyl ether	ND	0.020	--	ND	0.072	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Chloroform	0.021	0.020	--	0.102	0.098	--		1
1,2-Dichloroethane	ND	0.020	--	ND	0.081	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Benzene	0.189	0.100	--	0.604	0.319	--		1
Carbon tetrachloride	0.066	0.020	--	0.415	0.126	--		1
1,2-Dichloropropane	ND	0.020	--	ND	0.092	--		1
Bromodichloromethane	ND	0.020	--	ND	0.134	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
cis-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1

Project Name: METROPOLITAN H.S (Q686) **Lab Number:** L1203929

Project Number: 015.19125.1354 **Report Date:** 03/09/12

SAMPLE RESULTS

Lab ID: L1203929-04 Date Collected: 03/06/12 19:03

Client ID: ROOM 1001 Date Received: 03/07/12

Sample Location: QUEENS, NY Field Prep: Not Specified

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air by SIM - Mansfield Lab								
trans-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Toluene	0.435	0.050	--	1.64	0.188	--		1
Dibromochloromethane	ND	0.020	--	ND	0.170	--		1
1,2-Dibromoethane	ND	0.020	--	ND	0.154	--		1
Tetrachloroethene	0.062	0.020	--	0.420	0.136	--		1
1,1,1,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
Chlorobenzene	ND	0.020	--	ND	0.092	--		1
Ethylbenzene	0.118	0.020	--	0.512	0.087	--		1
p/m-Xylene	0.201	0.040	--	0.873	0.174	--		1
Bromoform	ND	0.020	--	ND	0.207	--		1
Styrene	0.030	0.020	--	0.128	0.085	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
o-Xylene	0.078	0.020	--	0.339	0.087	--		1
1,3,5-Trimethylbenzene	0.027	0.020	--	0.133	0.098	--		1
1,2,4-Trimethylbenzene	0.089	0.020	--	0.438	0.098	--		1
1,3-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
1,4-Dichlorobenzene	0.026	0.020	--	0.156	0.120	--		1
1,2-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
1,2,4-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Hexachlorobutadiene	ND	0.050	--	ND	0.533	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	86		60-140
bromochloromethane	92		60-140
chlorobenzene-d5	86		60-140

Project Name: METROPOLITAN H.S (Q686) **Lab Number:** L1203929

Project Number: 015.19125.1354 **Report Date:** 03/09/12

SAMPLE RESULTS

Lab ID: L1203929-05
Client ID: MAIN ENT. P233
Sample Location: QUEENS, NY
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 03/08/12 21:16
Analyst: MB

Date Collected: 03/06/12 19:11
Date Received: 03/07/12
Field Prep: Not Specified

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Lab								
Dichlorodifluoromethane	0.439	0.050	--	2.17	0.247	--		1
Chloromethane	0.527	0.500	--	1.09	1.03	--		1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.050	--	ND	0.349	--		1
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,3-Butadiene	0.022	0.020	--	0.049	0.044	--		1
Bromomethane	ND	0.020	--	ND	0.078	--		1
Chloroethane	ND	0.020	--	ND	0.053	--		1
Trichlorofluoromethane	0.207	0.050	--	1.16	0.281	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Methylene chloride	ND	1.00	--	ND	3.47	--		1
1,1,2-Trichloro-1,2,2-Trifluoroethane	0.076	0.050	--	0.582	0.383	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
Methyl tert butyl ether	ND	0.020	--	ND	0.072	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Chloroform	ND	0.020	--	ND	0.098	--		1
1,2-Dichloroethane	ND	0.020	--	ND	0.081	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Benzene	0.226	0.100	--	0.722	0.319	--		1
Carbon tetrachloride	0.072	0.020	--	0.453	0.126	--		1
1,2-Dichloropropane	ND	0.020	--	ND	0.092	--		1
Bromodichloromethane	ND	0.020	--	ND	0.134	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
cis-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1

Project Name: METROPOLITAN H.S (Q686) ***Lab Number:*** L1203929

Project Number: 015.19125.1354 ***Report Date:*** 03/09/12

SAMPLE RESULTS

Lab ID: L1203929-05 Date Collected: 03/06/12 19:11

Client ID: MAIN ENT. P233 Date Received: 03/07/12

Sample Location: QUEENS, NY Field Prep: Not Specified

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Lab								
trans-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Toluene	0.568	0.050	--	2.14	0.188	--		1
Dibromochloromethane	ND	0.020	--	ND	0.170	--		1
1,2-Dibromoethane	ND	0.020	--	ND	0.154	--		1
Tetrachloroethene	0.047	0.020	--	0.319	0.136	--		1
1,1,1,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
Chlorobenzene	ND	0.020	--	ND	0.092	--		1
Ethylbenzene	0.062	0.020	--	0.269	0.087	--		1
p/m-Xylene	0.185	0.040	--	0.804	0.174	--		1
Bromoform	ND	0.020	--	ND	0.207	--		1
Styrene	ND	0.020	--	ND	0.085	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
o-Xylene	0.063	0.020	--	0.274	0.087	--		1
1,3,5-Trimethylbenzene	ND	0.020	--	ND	0.098	--		1
1,2,4-Trimethylbenzene	0.052	0.020	--	0.256	0.098	--		1
1,3-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
1,4-Dichlorobenzene	0.021	0.020	--	0.126	0.120	--		1
1,2-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
1,2,4-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Hexachlorobutadiene	ND	0.050	--	ND	0.533	--		1

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-difluorobenzene	82		60-140
bromochloromethane	92		60-140
chlorobenzene-d5	84		60-140

Project Name: METROPOLITAN H.S (Q686) **Lab Number:** L1203929

Project Number: 015.19125.1354 **Report Date:** 03/09/12

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15-SIM
Analytical Date: 03/08/12 14:36

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air by SIM - Mansfield Lab for sample(s): 01-05 Batch: WG522117-4								
Dichlorodifluoromethane	ND	0.050	--	ND	0.247	--		1
Chloromethane	ND	0.500	--	ND	1.03	--		1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.050	--	ND	0.349	--		1
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,3-Butadiene	ND	0.020	--	ND	0.044	--		1
Bromomethane	ND	0.020	--	ND	0.078	--		1
Chloroethane	ND	0.020	--	ND	0.053	--		1
Acetone	ND	2.00	--	ND	4.75	--		1
Trichlorofluoromethane	ND	0.050	--	ND	0.281	--		1
Acrylonitrile	ND	0.500	--	ND	1.08	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Methylene chloride	ND	1.00	--	ND	3.47	--		1
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.050	--	ND	0.383	--		1
Halothane	ND	0.050	--	ND	0.404	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
Methyl tert butyl ether	ND	0.020	--	ND	0.072	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Chloroform	ND	0.020	--	ND	0.098	--		1
1,2-Dichloroethane	ND	0.020	--	ND	0.081	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Benzene	ND	0.100	--	ND	0.319	--		1
Carbon tetrachloride	ND	0.020	--	ND	0.126	--		1
1,2-Dichloropropane	ND	0.020	--	ND	0.092	--		1

Project Name: METROPOLITAN H.S (Q686) **Lab Number:** L1203929

Project Number: 015.19125.1354 **Report Date:** 03/09/12

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15-SIM
Analytical Date: 03/08/12 14:36

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air by SIM - Mansfield Lab for sample(s): 01-05 Batch: WG522117-4								
Bromodichloromethane	ND	0.020	--	ND	0.134	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
1,4-Dioxane	ND	0.100	--	ND	0.360	--		1
cis-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Toluene	ND	0.050	--	ND	0.188	--		1
Dibromochloromethane	ND	0.020	--	ND	0.170	--		1
1,2-Dibromoethane	ND	0.020	--	ND	0.154	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1
1,1,1,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
Chlorobenzene	ND	0.020	--	ND	0.092	--		1
Ethylbenzene	ND	0.020	--	ND	0.087	--		1
p/m-Xylene	ND	0.040	--	ND	0.174	--		1
Bromoform	ND	0.020	--	ND	0.207	--		1
Styrene	ND	0.020	--	ND	0.085	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
o-Xylene	ND	0.020	--	ND	0.087	--		1
Isopropylbenzene	ND	0.500	--	ND	2.46	--		1
1,3,5-Trimethylbenzene	ND	0.020	--	ND	0.098	--		1
1,2,4-Trimethylbenzene	ND	0.020	--	ND	0.098	--		1
1,3-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
1,4-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
sec-Butylbenzene	ND	0.500	--	ND	2.74	--		1

Project Name: METROPOLITAN H.S (Q686) **Lab Number:** L1203929

Project Number: 015.19125.1354 **Report Date:** 03/09/12

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15-SIM
Analytical Date: 03/08/12 14:36

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air by SIM - Mansfield Lab for sample(s): 01-05 Batch: WG522117-4								
p-Isopropyltoluene	ND	0.500	--	ND	2.74	--		1
1,2-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
n-Butylbenzene	ND	0.500	--	ND	2.74	--		1
1,2,4-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Naphthalene	ND	0.050	--	ND	0.262	--		1
1,2,3-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Hexachlorobutadiene	ND	0.050	--	ND	0.533	--		1

Lab Control Sample Analysis

Batch Quality Control

Project Name: METROPOLITAN H.S (Q686)

Project Number: 015.19125.1354

Lab Number: L1203929

Report Date: 03/09/12

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air by SIM - Mansfield Lab Associated sample(s): 01-05 Batch: WG522117-3								
Dichlorodifluoromethane	98		-		70-130	-		25
Chloromethane	96		-		70-130	-		25
1,2-Dichloro-1,1,2,2-tetrafluoroethane	97		-		70-130	-		25
Vinyl chloride	95		-		70-130	-		25
1,3-Butadiene	103		-		70-130	-		25
Bromomethane	93		-		70-130	-		25
Chloroethane	97		-		70-130	-		25
Acetone	95		-		70-130	-		25
Trichlorofluoromethane	100		-		70-130	-		25
Acrylonitrile	93		-		70-130	-		25
1,1-Dichloroethene	100		-		70-130	-		25
Methylene chloride	106		-		70-130	-		25
1,1,2-Trichloro-1,2,2-Trifluoroethane	101		-		70-130	-		25
Halothane	93		-		70-130	-		25
trans-1,2-Dichloroethene	83		-		70-130	-		25
1,1-Dichloroethane	91		-		70-130	-		25
Methyl tert butyl ether	79		-		70-130	-		25
2-Butanone	77		-		70-130	-		25
cis-1,2-Dichloroethene	105		-		70-130	-		25
Chloroform	98		-		70-130	-		25
1,2-Dichloroethane	98		-		70-130	-		25

Lab Control Sample Analysis

Batch Quality Control

Project Name: METROPOLITAN H.S (Q686)

Project Number: 015.19125.1354

Lab Number: L1203929

Report Date: 03/09/12

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air by SIM - Mansfield Lab Associated sample(s): 01-05 Batch: WG522117-3								
1,1,1-Trichloroethane	97		-		70-130	-		25
Benzene	86		-		70-130	-		25
Carbon tetrachloride	99		-		70-130	-		25
1,2-Dichloropropane	99		-		70-130	-		25
Bromodichloromethane	98		-		70-130	-		25
Trichloroethene	90		-		70-130	-		25
1,4-Dioxane	82		-		70-130	-		25
cis-1,3-Dichloropropene	98		-		70-130	-		25
4-Methyl-2-pentanone	87		-		70-130	-		25
trans-1,3-Dichloropropene	82		-		70-130	-		25
1,1,2-Trichloroethane	95		-		70-130	-		25
Toluene	84		-		70-130	-		25
Dibromochloromethane	94		-		70-130	-		25
1,2-Dibromoethane	91		-		70-130	-		25
Tetrachloroethene	91		-		70-130	-		25
1,1,1,2-Tetrachloroethane	90		-		70-130	-		25
Chlorobenzene	92		-		70-130	-		25
Ethylbenzene	91		-		70-130	-		25
p/m-Xylene	91		-		70-130	-		25
Bromoform	94		-		70-130	-		25
Styrene	95		-		70-130	-		25

Lab Control Sample Analysis

Batch Quality Control

Project Name: METROPOLITAN H.S (Q686)

Project Number: 015.19125.1354

Lab Number: L1203929

Report Date: 03/09/12

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air by SIM - Mansfield Lab Associated sample(s): 01-05 Batch: WG522117-3								
1,1,2,2-Tetrachloroethane	93		-		70-130	-		25
o-Xylene	91		-		70-130	-		25
Isopropylbenzene	89		-		70-130	-		25
1,3,5-Trimethylbenzene	93		-		70-130	-		25
1,2,4-Trimethylbenzene	94		-		70-130	-		25
1,3-Dichlorobenzene	91		-		70-130	-		25
1,4-Dichlorobenzene	90		-		70-130	-		25
sec-Butylbenzene	89		-		70-130	-		25
p-Isopropyltoluene	83		-		70-130	-		25
1,2-Dichlorobenzene	93		-		70-130	-		25
n-Butylbenzene	90		-		70-130	-		25
1,2,4-Trichlorobenzene	85		-		70-130	-		25
Naphthalene	81		-		70-130	-		25
1,2,3-Trichlorobenzene	83		-		70-130	-		25
Hexachlorobutadiene	90		-		70-130	-		25

Lab Duplicate Analysis
Batch Quality Control

Project Name: METROPOLITAN H.S (Q686)
Project Number: 015.19125.1354

Lab Number: L1203929
Report Date: 03/09/12

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics in Air by SIM - Mansfield Lab Associated sample(s): 01-05 QC Batch ID: WG522117-5 QC Sample: L1203929-03 Client ID: ROOM 05						
Dichlorodifluoromethane	0.456	0.467	ppbV	2		25
Chloromethane	ND	ND	ppbV	NC		25
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	ND	ppbV	NC		25
Vinyl chloride	ND	ND	ppbV	NC		25
1,3-Butadiene	0.024	0.024	ppbV	0		25
Bromomethane	ND	ND	ppbV	NC		25
Chloroethane	ND	ND	ppbV	NC		25
Trichlorofluoromethane	0.213	0.224	ppbV	5		25
1,1-Dichloroethene	ND	ND	ppbV	NC		25
Methylene chloride	ND	ND	ppbV	NC		25
1,1,2-Trichloro-1,2,2-Trifluoroethane	0.062	0.066	ppbV	6		25
trans-1,2-Dichloroethene	ND	ND	ppbV	NC		25
1,1-Dichloroethane	ND	ND	ppbV	NC		25
Methyl tert butyl ether	ND	ND	ppbV	NC		25
cis-1,2-Dichloroethene	ND	ND	ppbV	NC		25
Chloroform	0.596	0.627	ppbV	5		25
1,2-Dichloroethane	ND	ND	ppbV	NC		25
1,1,1-Trichloroethane	ND	ND	ppbV	NC		25
Benzene	0.187	0.207	ppbV	10		25

Lab Duplicate Analysis
Batch Quality Control

Project Name: METROPOLITAN H.S (Q686)
Project Number: 015.19125.1354

Lab Number: L1203929
Report Date: 03/09/12

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Volatile Organics in Air by SIM - Mansfield Lab Associated sample(s): 01-05 QC Batch ID: WG522117-5 QC Sample: L1203929-03 Client ID: ROOM 05					
Carbon tetrachloride	0.072	0.078	ppbV	8	25
1,2-Dichloropropane	ND	ND	ppbV	NC	25
Bromodichloromethane	0.029	0.031	ppbV	7	25
Trichloroethene	ND	0.021	ppbV	NC	25
cis-1,3-Dichloropropene	ND	ND	ppbV	NC	25
trans-1,3-Dichloropropene	ND	ND	ppbV	NC	25
1,1,2-Trichloroethane	ND	ND	ppbV	NC	25
Toluene	0.309	0.319	ppbV	3	25
Dibromochloromethane	ND	ND	ppbV	NC	25
1,2-Dibromoethane	ND	ND	ppbV	NC	25
Tetrachloroethene	0.042	0.044	ppbV	5	25
1,1,1,2-Tetrachloroethane	ND	ND	ppbV	NC	25
Chlorobenzene	ND	ND	ppbV	NC	25
Ethylbenzene	0.410	0.428	ppbV	4	25
p/m-Xylene	1.55	1.61	ppbV	4	25
Bromoform	ND	ND	ppbV	NC	25
Styrene	0.028	0.030	ppbV	7	25
1,1,2,2-Tetrachloroethane	ND	ND	ppbV	NC	25
o-Xylene	0.496	0.521	ppbV	5	25

Lab Duplicate Analysis
Batch Quality Control

Project Name: METROPOLITAN H.S (Q686)
Project Number: 015.19125.1354

Lab Number: L1203929
Report Date: 03/09/12

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Volatile Organics in Air by SIM - Mansfield Lab Associated sample(s): 01-05 QC Batch ID: WG522117-5 QC Sample: L1203929-03 Client ID: ROOM 05					
1,3,5-Trimethylbenzene	0.026	0.027	ppbV	4	25
1,2,4-Trimethylbenzene	0.066	0.069	ppbV	4	25
1,3-Dichlorobenzene	ND	ND	ppbV	NC	25
1,4-Dichlorobenzene	ND	ND	ppbV	NC	25
1,2-Dichlorobenzene	ND	ND	ppbV	NC	25
1,2,4-Trichlorobenzene	ND	ND	ppbV	NC	25
Hexachlorobutadiene	ND	ND	ppbV	NC	25

Project Name: METROPOLITAN H.S (Q686)

Lab Number: L1203929

Project Number: 015.19125.1354

Report Date: 03/09/12

Canister and Flow Controller Information

Samplenum	Client ID	Media ID	Media Type	Date Prepared	Bottle Order	Cleaning Batch ID	Can Leak Check	Initial Pressure (in. Hg)	Pressure on Receipt (in. Hg)	Flow Controler Leak Chk	Flow Out mL/min	Flow In mL/min	% RSD
L1203929-01	OUTDOOR	0349	#20 AMB	02/29/12	75412		-	-	-	-	9.7	9.5	2
L1203929-01	OUTDOOR	599	6.0L Can	02/29/12	75412	L1202690	-	-29.5	-3.7	-	-	-	-
L1203929-02	ROOM 21	0275	#20 AMB	02/29/12	75412		-	-	-	-	10.0	10.0	0
L1203929-02	ROOM 21	610	6.0L Can	02/29/12	75412	L1202690	-	-29.8	-2.8	-	-	-	-
L1203929-03	ROOM 05	0014	#90 AMB	02/29/12	75412		-	-	-	-	9.9	9.5	4
L1203929-03	ROOM 05	975	6.0L Can	02/29/12	75412	L1202690	-	-29.7	-5.0	-	-	-	-
L1203929-04	ROOM 1001	0030	#20 AMB	02/29/12	75412		-	-	-	-	9.5	9.3	2
L1203929-04	ROOM 1001	984	6.0L Can	02/29/12	75412	L1202690	-	-29.8	-6.3	-	-	-	-
L1203929-05	MAIN ENT. P233	0272	#16 AMB	02/29/12	75412		-	-	-	-	10.0	9.6	4
L1203929-05	MAIN ENT. P233	1679	6.0L Can	02/29/12	75412	L1202690	-	-29.8	-6.1	-	-	-	-

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L1202690
Report Date: 03/09/12

Air Canister Certification Results

Lab ID: L1202690-01
Client ID: CAN 979 SHELF 38
Sample Location:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 02/16/12 17:58
Analyst: MB

Date Collected: 02/14/12 13:01
Date Received: 02/16/12
Field Prep: Not Specified

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Chlorodifluoromethane	ND	0.200	--	ND	0.707	--		1
Propylene	ND	0.500	--	ND	0.860	--		1
Propane	ND	0.200	--	ND	0.361	--		1
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Methanol	ND	5.00	--	ND	6.55	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Butane	ND	0.200	--	ND	0.475	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	ND	2.50	--	ND	4.71	--		1
Dichlorofluoromethane	ND	0.200	--	ND	0.842	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acrolein	ND	0.500	--	ND	1.15	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Acetonitrile	ND	0.200	--	ND	0.336	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	ND	0.500	--	ND	1.23	--		1
Acrylonitrile	ND	0.200	--	ND	0.434	--		1
Pentane	ND	0.200	--	ND	0.590	--		1
Ethyl ether	ND	0.200	--	ND	0.606	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1

Project Name: BATCH CANISTER CERTIFICATION **Lab Number:** L1202690

Project Number: CANISTER QC BAT **Report Date:** 03/09/12

Air Canister Certification Results

Lab ID: L1202690-01 Date Collected: 02/14/12 13:01

Client ID: CAN 979 SHELF 38 Date Received: 02/16/12

Sample Location: Field Prep: Not Specified

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Methylene chloride	ND	1.00	--	ND	3.47	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
Vinyl acetate	ND	0.200	--	ND	0.704	--		1
2-Butanone	ND	0.200	--	ND	0.590	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.200	--	ND	0.590	--		1
2,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
Diisopropyl ether	ND	0.200	--	ND	0.836	--		1
tert-Butyl Ethyl Ether	ND	0.200	--	ND	0.836	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
1,1-Dichloropropene	ND	0.200	--	ND	0.908	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
tert-Amyl Methyl Ether	ND	0.200	--	ND	0.836	--		1
Dibromomethane	ND	0.200	--	ND	1.42	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1

Project Name: BATCH CANISTER CERTIFICATION **Lab Number:** L1202690

Project Number: CANISTER QC BAT **Report Date:** 03/09/12

Air Canister Certification Results

Lab ID: L1202690-01 Date Collected: 02/14/12 13:01

Client ID: CAN 979 SHELF 38 Date Received: 02/16/12

Sample Location: Field Prep: Not Specified

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
2,4,4-trimethyl-1-pentene	ND	0.500	--	ND	2.29	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.200	--	ND	0.820	--		1
2,4,4-trimethyl-2-pentene	ND	0.500	--	ND	2.29	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	ND	0.200	--	ND	0.754	--		1
1,3-Dichloropropane	ND	0.200	--	ND	0.924	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Butyl acetate	ND	0.500	--	ND	2.38	--		1
Octane	ND	0.200	--	ND	0.934	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
1,1,1,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
1,2,3-Trichloropropane	ND	0.200	--	ND	1.20	--		1
Nonane	ND	0.200	--	ND	1.05	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1

Project Name: BATCH CANISTER CERTIFICATION **Lab Number:** L1202690

Project Number: CANISTER QC BAT **Report Date:** 03/09/12

Air Canister Certification Results

Lab ID: L1202690-01 Date Collected: 02/14/12 13:01

Client ID: CAN 979 SHELF 38 Date Received: 02/16/12

Sample Location: Field Prep: Not Specified

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Bromobenzene	ND	0.200	--	ND	0.793	--		1
2-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
n-Propylbenzene	ND	0.200	--	ND	0.983	--		1
4-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethybenzene	ND	0.200	--	ND	0.983	--		1
tert-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Decane	ND	0.200	--	ND	1.16	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2-Dibromo-3-chloropropane	ND	0.200	--	ND	1.93	--		1
Undecane	ND	0.200	--	ND	1.28	--		1
Dodecane	ND	0.200	--	ND	1.39	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Naphthalene	ND	0.200	--	ND	1.05	--		1
1,2,3-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	89		60-140
Bromochloromethane	88		60-140
chlorobenzene-d5	88		60-140

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L1202690
Report Date: 03/09/12

Air Canister Certification Results

Lab ID: L1202690-01
Client ID: CAN 979 SHELF 38
Sample Location:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 02/16/12 17:58
Analyst: RY

Date Collected: 02/14/12 13:01
Date Received: 02/16/12
Field Prep: Not Specified

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air by SIM - Mansfield Lab								
Dichlorodifluoromethane	ND	0.050	--	ND	0.247	--		1
Chloromethane	ND	0.500	--	ND	1.03	--		1
Freon-114	ND	0.050	--	ND	0.349	--		1
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,3-Butadiene	ND	0.020	--	ND	0.044	--		1
Bromomethane	ND	0.020	--	ND	0.078	--		1
Chloroethane	ND	0.020	--	ND	0.053	--		1
Acetone	ND	2.00	--	ND	4.75	--		1
Trichlorofluoromethane	ND	0.050	--	ND	0.281	--		1
Acrylonitrile	ND	0.500	--	ND	1.08	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Methylene chloride	ND	1.00	--	ND	3.47	--		1
Freon-113	ND	0.050	--	ND	0.383	--		1
Halothane	ND	0.050	--	ND	0.404	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
Methyl tert butyl ether	ND	0.020	--	ND	0.072	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Chloroform	ND	0.020	--	ND	0.098	--		1
1,2-Dichloroethane	ND	0.020	--	ND	0.081	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Benzene	ND	0.100	--	ND	0.319	--		1
Carbon tetrachloride	ND	0.020	--	ND	0.126	--		1
1,2-Dichloropropane	ND	0.020	--	ND	0.092	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L1202690
Report Date: 03/09/12

Air Canister Certification Results

Lab ID: L1202690-01
Client ID: CAN 979 SHELF 38
Sample Location:
Date Collected: 02/14/12 13:01
Date Received: 02/16/12
Field Prep: Not Specified

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Lab								
Bromodichloromethane	ND	0.020	--	ND	0.134	--		1
1,4-Dioxane	ND	0.100	--	ND	0.360	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
cis-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Toluene	ND	0.050	--	ND	0.188	--		1
Dibromochloromethane	ND	0.020	--	ND	0.170	--		1
1,2-Dibromoethane	ND	0.020	--	ND	0.154	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1
1,1,1,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
Chlorobenzene	ND	0.020	--	ND	0.092	--		1
Ethylbenzene	ND	0.020	--	ND	0.087	--		1
p/m-Xylene	ND	0.040	--	ND	0.174	--		1
Bromoform	ND	0.020	--	ND	0.207	--		1
Styrene	ND	0.020	--	ND	0.085	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
o-Xylene	ND	0.020	--	ND	0.087	--		1
Isopropylbenzene	ND	0.500	--	ND	2.46	--		1
1,3,5-Trimethybenzene	ND	0.020	--	ND	0.098	--		1
1,2,4-Trimethylbenzene	ND	0.020	--	ND	0.098	--		1
1,3-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
1,4-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
sec-Butylbenzene	ND	0.500	--	ND	2.74	--		1
p-Isopropyltoluene	ND	0.500	--	ND	2.74	--		1
1,2-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
n-Butylbenzene	ND	0.500	--	ND	2.74	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L1202690
Report Date: 03/09/12

Air Canister Certification Results

Lab ID: L1202690-01
Client ID: CAN 979 SHELF 38
Sample Location:
Date Collected: 02/14/12 13:01
Date Received: 02/16/12
Field Prep: Not Specified

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Lab								
1,2,4-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Naphthalene	ND	0.050	--	ND	0.262	--		1
1,2,3-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Hexachlorobutadiene	ND	0.050	--	ND	0.533	--		1

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-difluorobenzene	94		60-140
bromochloromethane	95		60-140
chlorobenzene-d5	91		60-140

AIR Petro Can Certification

Project Name: BATCH CANISTER CERTIFICATION **Lab Number:** L1202690

Project Number: CANISTER QC BAT **Report Date:** 03/09/12

AIR CAN CERTIFICATION RESULTS

Lab ID:	L1202690-01	Date Collected:	02/14/12 13:01
Client ID:	CAN 979 SHELF 38	Date Received:	02/16/12
Sample Location:	Not Specified	Field Prep:	Not Specified
Matrix:	Air		
Analytical Method:	96,APH		
Analytical Date:	02/18/12 16:39		
Analyst:	RY		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Petroleum Hydrocarbons in Air - Mansfield Lab						
1,3-Butadiene	ND		ug/m3	2.0	--	1
Methyl tert butyl ether	ND		ug/m3	2.0	--	1
Benzene	ND		ug/m3	2.0	--	1
Toluene	ND		ug/m3	2.0	--	1
C5-C8 Aliphatics, Adjusted	ND		ug/m3	12	--	1
Ethylbenzene	ND		ug/m3	2.0	--	1
p/m-Xylene	ND		ug/m3	4.0	--	1
o-Xylene	ND		ug/m3	2.0	--	1
Naphthalene	ND		ug/m3	2.0	--	1
C9-C12 Aliphatics, Adjusted	ND		ug/m3	14	--	1
C9-C10 Aromatics Total	ND		ug/m3	10	--	1

Project Name: METROPOLITAN H.S (Q686)
Project Number: 015.19125.1354

Lab Number: L1203929
Report Date: 03/09/12

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Reagent H2O Preserved Vials Frozen on: NA

Cooler Information **Custody Seal**
Cooler
N/A Absent

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1203929-01A	Canister - 6 Liter	N/A	N/A		Y	Absent	TO15-SIM(30)
L1203929-02A	Canister - 6 Liter	N/A	N/A		Y	Absent	TO15-SIM(30)
L1203929-03A	Canister - 6 Liter	N/A	N/A		Y	Absent	TO15-SIM(30)
L1203929-04A	Canister - 6 Liter	N/A	N/A		Y	Absent	TO15-SIM(30)
L1203929-05A	Canister - 6 Liter	N/A	N/A		Y	Absent	TO15-SIM(30)

*Values in parentheses indicate holding time in days

Project Name:	METROPOLITAN H.S (Q686)	**Lab Number:**	L1203929
Project Number:	015.19125.1354	**Report Date:**	03/09/12

GLOSSARY

Acronyms

EPA - Environmental Protection Agency.

LCS - Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

LCSD - Laboratory Control Sample Duplicate: Refer to LCS.

LFB - Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

MDL - Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

MS - Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.

MSD - Matrix Spike Sample Duplicate: Refer to MS.

NA - Not Applicable.

NC - Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.

NI - Not Ignitable.

RL - Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

RPD - Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.

SRM - Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.

Footnotes

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

Terms

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

Data Qualifiers

A - Spectra identified as "Aldol Condensation Product".

B - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than five times (5x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit.

C - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.

D - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

G - The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.

H - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

I - The RPD between the results for the two columns exceeds the method-specified criteria; however, the lower value has been reported due to obvious interference.

M - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

NJ - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

Report Format: Data Usability Report

Project Name:	METROPOLITAN H.S (Q686)	**Lab Number:**	L1203929
Project Number:	015.19125.1354	**Report Date:**	03/09/12

Data Qualifiers

P - The RPD between the results for the two columns exceeds the method-specified criteria.

Q - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

J - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

ND - Not detected at the reporting limit (RL) for the sample.

Report Format: Data Usability Report

REFERENCES

48 Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air. Second Edition. EPA/625/R-96/010b, January 1999.

LIMITATION OF LIABILITIES

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

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

Certificate/Approval Program Summary

Last revised January 30, 2012 – Mansfield Facility

The following list includes only those analytes/methods for which certification/approval is currently held.
For a complete listing of analytes for the referenced methods, please contact your Alpha Customer Service Representative.

Connecticut Department of Public Health Certificate/Lab ID: PH-0141.

Wastewater/Non-Potable Water (Inorganic Parameters: pH, Turbidity, Conductivity, Alkalinity, Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Strontium, Thallium, Tin, Vanadium, Zinc, Total Residue (Solids), Total Suspended Solids (non-filterable), Total Cyanide. Organic Parameters: PCBs, Organochlorine Pesticides, Technical Chlordane, Toxaphene, Acid Extractables, Benzidines, Phthalate Esters, Nitrosamines, Nitroaromatics & Isophorone, PAHs, Haloethers, Chlorinated Hydrocarbons, Volatile Organics.)

Solid Waste/Soil (Inorganic Parameters: pH, Aluminum, Antimony, Arsenic, Barium, Beryllium, Cadmium, Calcium, Chromium, Hexavalent Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Thallium, Vanadium, Zinc, Total Organic Carbon, Total Cyanide, Corrosivity, TCLP 1311. Organic Parameters: PCBs, Organochlorine Pesticides, Technical Chlordane, Toxaphene, Volatile Organics, Acid Extractables, Benzidines, Phthalates, Nitrosamines, Nitroaromatics & Cyclic Ketones, PAHs, Haloethers, Chlorinated Hydrocarbons.)

Florida Department of Health Certificate/Lab ID: E87814. ***NELAP Accredited.***

Non-Potable Water (Inorganic Parameters: SM2320B, SM2540D, SM2540G.)

Solid & Chemical Materials (Inorganic Parameters: 6020, 7470, 7471, 9045. Organic Parameters: EPA 8260, 8270, 8082, 8081.)

Air & Emissions (EPA TO-15.)

Louisiana Department of Environmental Quality Certificate/Lab ID: 03090. ***NELAP Accredited.***

Non-Potable Water (Inorganic Parameters: EPA 180.1, 245.7, 1631E, 3020, 6020A, 7470A, 9040, 9050A, SM2320B, 2540D, 2540G, 4500H-B, Organic Parameters: EPA 3510C, 3580A, 3630C, 3640A, 3660B, 3665A, 5030B, 8015D, 3570, 8081B, 8082A, 8260B, 8270C, 8270D.)

Solid & Chemical Materials (Inorganic Parameters: EPA 1311, 3050, 3051A, 3060A, 6020A, 7196A, 7470A, 7471B, 7474, 9040B, 9045C, 9060. Organic Parameters: EPA 3540C, 3570B, 3580A, 3630C, 3640A, 3660, 3665A, 5035, 8015D, 8081B, 8082A, 8260B, 8270C, 8270D.)

Biological Tissue (Inorganic Parameters: EPA 6020A. Organic Parameters: EPA 3570, 3510C, 3610B, 3630C, 3640A, 8270C, 8270D.)

Air & Emissions (EPA TO-15.)

New Hampshire Department of Environmental Services Certificate/Lab ID: 2206. ***NELAP Accredited.***

Non-Potable Water (Inorganic Parameters: EPA 245.7, 1631E, 6020A, 7470A, 9040B, 9050A, SM2540D, 2540G, 4500H+B, 2320B. Organic Parameters: EPA 8081B, 8082A, 8260B, 8270C, 8015D.)

Solid & Chemical Materials (Inorganic Parameters: SW-846 1311, 1312, 3050B, 3051A, 3060A, 6020A, 7471A, 9040B, 9045C, 7196A. Organic Parameters: SW-846 3540C, 3580A, 3630C, 3640A, 3660B, 3665A, 5035, 8260B, 8270C, 8015D, 8082A, 8081B.)

New Jersey Department of Environmental Protection Certificate/Lab ID: MA015. ***NELAP Accredited.***

Non-Potable Water (Inorganic Parameters: SW-846 1312, 3010, 3020A, SM2320B, SM2540D, 2540G, EPA 180.1, 1631E, SW-846 7470A, 9040B, 6020, 9050A. Organic Parameters: SW-846 3510C, 3580A, 5030B, 5035L, 5035H, 3630C, 3640A, 3660B, 3665A, 8015B 8081A, 8082, 8260B, 8270C)

Solid & Chemical Materials (Inorganic Parameters: SW-846 6020, 1311, 1312, 3050B, 3051, 3060A, 7196A, 7470A, 7471A, 7474, 9040B, 9045C, 9060. Organic Parameters: SW-846 3540C, 3570, 3580A, 5030B, 5035L, 5035H, 3630C, 3640A, 3660B, 3665A, 8081A, 8082, 8260B, 8270C, 8015B.)

Atmospheric Organic Parameters (EPA TO-15)

Biological Tissue (Inorganic Parameters: SW-846 6020 Organic Parameters: SW-846 8270C, 3510C, 3570, 3610C, 3630C, 3640A)

New York Department of Health Certificate/Lab ID: 11627. ***NELAP Accredited.***

Non-Potable Water (Inorganic Parameters: SM2320B, SM2540D, EPA 200.8, 6020, 1631E, 245.1, 245.7, 7470A, 9014, 9040B, 9050, 120.1, 4500CN-E, 4500H-B, EPA 376.2, 180.1, 3020A. Organic Parameters: EPA 8260B, 8270C, 8081A, 8082, 3510C, 5030B.)

Solid & Hazardous Waste (Inorganic Parameters: EPA 6020, 7196A, 3060A, 7471A, 7474, 9014, 9040B, 9045C, 9010B. Organic Parameters: EPA 8260B, 8270C, 8081A, DRO 8015B, 8082, 1311, 1312, 3050B, 3580, 3570, 3051, 5035, 5030B.)

Air & Emissions (EPA TO-15.)

Pennsylvania Certificate/Lab ID: 68-02089 ***NELAP Accredited***

Solid & Hazardous Waste (Inorganic Parameters: EPA 6020A,7471B, 7474. Organic Parameters: EPA3050B, 3540C, 3630C, 8270C, 8081B, 8082A.)

Rhode Island Department of Health Certificate/Lab ID: LAO00299. ***NELAP Accredited via LA-DEQ.***

Refer to LA-DEQ Certificate for Non-Potable Water.

Texas Commission of Environmental Quality Certificate/Lab ID: T104704419-08-TX. ***NELAP Accredited.***

Solid & Chemical Materials (Inorganic Parameters: EPA 6020, 7470, 7471, 1311, 7196, 9040, 9045, 9060. Organic Parameters: EPA 8015, 8270, 8260, 8081, 8082.)

Air (Organic Parameters: EPA TO-15)

Washington State Department of Ecology Certificate/Lab ID: C954. *Non-Potable Water* (Inorganic Parameters: SM2540D, 180.1, 1631E.)

Solid & Chemical Materials (Inorganic Parameters: EPA 6020, 7470, 7471, 7474, 9045C, 9050A, 9060. Organic Parameters: EPA 8081, 8082, 8015 Mod, 8270.)

Virginia Division of Consolidated Laboratory Services Certificate/Lab ID:460194. ***NELAP Accredited.***

Non-Potable Water (Inorganic Parameters:EPA 3020A,6020A,245.7,9040B,SM4500H-B. Organic Parameters: EPA 3510C,3640A,3660B,3665A,8270C,8270D,8082A,8081B.)

Solid & Chemical Materials (Inorganic Parameters: EPA 6020A,7470A,7471B,9040B,9045C,3050B,3051. Organic Parameters: EPA 3540C, 3580A, 3630C, 3640A, 3660B, 3665A, 3570, 8270C, 8270D, 8081B, 8082A, 8015D.)

U.S. Army Corps of Engineers

Department of Defense, L-A-B Certificate/Lab ID: L2217.01.

Non-Potable Water (Inorganic Parameters: EPA 6020A, SM4500H-B. Organic Parameters: 3020A, 3510C, 5030B, 8260B, 8270C, 8270C-ALK-PAH, 8082, 8081A, 8015D-SHC, 8015D.)

Solid & Hazardous Waste (Inorganic Parameters: EPA 1311, 1312, 3050B, 6020A, 7471A, 9045C, 9060, SM 2540G, ASTM D422-63. Organic Parameters: EPA 3580A, 3570, 3540C, 5035A, 8260B, 8270C, 8270-ALK-PAH, 8082, 8081A, 8015D-SHC, 8015D.

Air & Emissions (EPA TO-15.)

Analytes Not Accredited by NELAP

Certification is not available by NELAP for the following analytes: **8270C:** Biphenyl. **TO-15:** Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 2-Methylnaphthalene, 1-Methylnaphthalene.

AIR ANALYSIS

PAGE 1 OF 1

CHAIN OF CUSTODY

320 Forbes Blvd, Mansfield, MA 02048
TEL: 508-822-9300 FAX: 508-822-3288

Serial_No:03091[illegible]09

Date Rec'd in Lab:

ALPHA Job #: L1203929

Client Information

Client: ATC Associates Inc.
Address: 104 E 25th street
New York, NY 10016
Phone: 212.353.8280
Fax: 212.353.8306
Email: donovanm15@atc-enviro.com
☐ These samples have been previously analyzed by Alpha

Project Information

Project Name: Metropolitan H.S. (Q686)
Project Location: Queens, NY
Project #: 015.19125.1354
Project Manager: M. Donovan
ALPHA Quote #:

Turn-Around Time

☐ Standard ☐ RUSH (only confirmed if pre-approved!)
48 TURNAROUND
Date Due: Time:

Report Information - Data Deliverables

☐ FAX
☐ ADEx
Criteria Checker:
(Default based on Regulatory Criteria Indicated)
Other Formats:
☐ EMAIL (standard pdf report)
☐ Additional Deliverables:
Report to: (if different than Project Manager)

Billing Information

☐ Same as Client info PO #:

Regulatory Requirements/Report Limits

State/Fed	Program	Criteria

Other Project Specific Requirements/Comments:

All Columns Below Must Be Filled Out

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Start Time	End Time	Initial Vacuum	Final Vacuum	Sample Matrix*	Sampler's Initials	Can Size	I D Can	I D - Flow Controller	TO-14A by TO-15	TO-15	TO-15 SIM	APH	FIXED GASES	TO-13A	TO-4 / TO-10	Sample Comments (i.e. PID)
03929 -01	Outdoors	3/6/12	10:40	18:40	-30.58	-5.11		WA		599	349			✓					
-02	Room 21	3/6/12	10:50	18:50	-30.78	-3.51		WA		610	275			✓					
-03	Room 05	3/6/12	11:00	19:00	-30.86	-5.8		WA		975	014			✓					
-04	Room 1001	3/6/12	11:03	19:03	-30.70	-7.25		WA		984	030			✓					
-05	Main Ent. P233	3/6/12	11:11	19:11	-30.74	-7.01		WA		1679	272			✓					

*SAMPLE MATRIX CODES
AA = Ambient Air (Indoor/Outdoor)
SV = Soil Vapor/Landfill Gas/SVE
Other = Please Specify

Container Type

Relinquished By:	Date/Time	Received By:	Date/Time:
Michael Don[illegible]	3/7/12 1:45 pm	[signature]	3/7/12 1845
[signature]	3/7/12 1730	S [illegible]	3/7/12 1730
S [illegible]	3/7/12 2143	[signature]	3-7-12 2143

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

Form No: 101-02 (19-Jun-09)

ATTACHMENT B
DOEWO

Facility: DSF DIVISION OF SCHOOL FACILITIES
Unit : Q Project :
W/O Type: CO Priority: 71 W/O Dspln: H
Planner : AHE HE
W/O Title : 75/28Q167@686/ PERFORM SSDS TRAINING
W/O Task Title: 75/28Q167Q686/ PERFORM SSDS TRAINING
Written To : METROPOLITAN HIGH SCHOOL CAMPUS
Task Dspln : Completed By:

AIC 2/9

Work Order Package

00461591 01

Rpt : TIPMC11
Date: 02/09/2012

NEW YORK CITY DEPT. OF EDUCATION

Page: 1

Work Order Task Written To

Facility : DSF
Division :
Equipment : ABLDG Q686
Work Item :
Equip. Tag:
UTC :
Catalog ID:
Client/Act:
Location : Q00 Q686 000001 9130 METROPOLITAN AV, FEGO PARK, NY 11374
Cost Centr: G839
Percentage: 100.000

Unit : Q
Area : ISC2
Component:
Eqt. List:
Alt:
Tbl/Brkdwn: (Past 12 mo)
Job Type : CO UCR: GN12
Activity :
Acct No. : GL

Op Sys : GEO-28
Sys/Cls: Q686
Ops Review Reqd: N
User Def:

Work Order Task Instructions

PERFORM SSDS TRAINING.

Completion Comments on Work Performed

Completion Comments Required : N

Comments:

Comments:

Comments:

Continued on Additional Sheets? : _____

***** E N D O F R E P O R T *****

Attachment 9
Training Acknowledgement

ATC ASSOCIATES INC.

104 East 25th St, 10th Floor
New York, NY 10010-2917
www.atcassociates.com
212-353-8280
Fax 212-353-8306

Annual Training Acknowledgement
Engineering Controls Operation and Maintenance

Location: Q686

Custodian/Fireman: IOANNIS GALATOULAS

I, I Galatoulas, received annual refresher training on Engineering Controls Operation and Maintenance by ATC Associates, Inc. on 3/6/12. As part of the annual refresher training I conducted a walkthrough with ATC Associates, Inc. during which all elements covered by the Operation and Maintenance Plan were explained to me including the completion of the daily logs and monthly inspection form.

Signed by: _____ **Date:** 3/6/12
Custodian/Fireman

ATC ASSOCIATES INC.

104 East 25th St, 10th Floor
New York, NY 10010-2917
www.atcassociates.com
212-353-8280
Fax 212-353-8306

Annual Training Acknowledgement
Engineering Controls Operation and Maintenance

Location: Q686

Custodian/Fireman: Eric Jackson

I, Eric Jackson, received annual refresher training on Engineering Controls Operation and Maintenance by ATC Associates, Inc. on 3/6/12. As part of the annual refresher training I conducted a walkthrough with ATC Associates, Inc. during which all elements covered by the Operation and Maintenance Plan were explained to me including the completion of the daily logs and monthly inspection form.

Signed by: _____ **Date:** 3/6/12
Custodian/Fireman