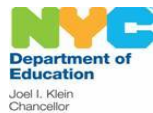


**REVISED ANNUAL SITE MANAGEMENT REPORT  
FROM SEPTEMBER 2010 TO SEPTEMBER 2011  
MOTT HAVEN CAMPUS-X790  
730 CONCOURSE VILLAGE WEST  
BRONX, NEW YORK  
BCP AGREEMENT # C-203030**

**PREPARED FOR:**



Joel I. Klein  
Chancellor

**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 25<sup>th</sup> Street, 10<sup>th</sup> Floor  
New York, New York 10010-2917

Date of Issue: March 22, 2011  
Revised: September 30, 2011

ATC Associates Inc. Project No. 015.19125.1109

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**Attachments:**

Attachment 1:	NYSDEC Comments
Attachment 2:	Custodian Monthly or Severe Condition Inspection Form
Attachment 3:	Biweekly Inspection Logs
Attachment 4:	Groundwater Monitoring Reports
Attachment 5:	Photographic Documentation
Attachment 6:	Annual Inspection Form
Attachment 7:	Correspondence Letter
Attachment 8:	Training Acknowledgment

**PROJECT DIRECTORY**

<b>CLIENT:</b>	New York City Department of Education Office of Environmental Health and Safety 44-36 Vernon Blvd. Long Island City, New York 11101
<b>PROJECT LOCATION:</b>	Mott Haven Campus - X790 730 Concourse Village West Bronx, New York, 10451
<b>PROJECT TECHNICAL SUPPORT</b>	New York State Department of Environmental Conservation 625 Broadway Albany, New York 12233  New York City School Construction Authority 30-30 Thomson Avenue Long Island City, New York 11101  Shaw Environmental, Inc. 1633 Broadway, 30 <sup>th</sup> Floor New York, NY 10019
<b>DESCRIPTION OF WORK:</b>	Review Site Management Plan, O&M plan and prior reports; review custodian's inspection forms, walk-through visual inspection
<b>ATC REPRESENTATIVES:</b>	Gilbert Gedeon, PE, Division Manager Wagdi Abdelshahid, IH, Project Manager

**EXECUTIVE SUMMARY**

This revised Site Management Report (SMR) covers the period from September 2010 to September 2011 for PS 790X located at 730 Concourse Village West, Bronx, NY. This SMR addresses the New York State Department of Environmental Conservation (NYSDEC) comments discussed during the August 5, 2011 meeting and sent via email to the New York City Department of Education (NYCDOE) on August 5, 2011 (See Attachment 1). This SMR also includes information based on the most recent annual site refresher training and site inspection conducted on September 20 and 21, 2011 pursuant to the NYSDEC-approved Site Management Plan (SMP).

The site inspection included an evaluation of engineering controls identified in the SMP 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 inspection and groundwater monitoring reports prepared by others.

ATC Associates, Inc. (ATC) concludes that the Engineering Controls (ECs) and Institutional Controls (ICs) have not changed, are effective, and protect public health and the environment.

## **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 790X located at 730 Concourse Village West in Bronx, NY. The school opened in September 2010 and is currently attended by approximately 430 students. This report was completed in accordance with the SMP approved by the NYSDEC.

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. Roof Vent SSDS Inspection, Basement Inspection and Exterior Inspection;
3. Review of SMP, Operations and Maintenance Plan (O&M Plan), Groundwater Monitoring Reports and SSDS Biweekly Inspection Logs; and
4. Photographic documentation of observations.

This report was developed to document: (a) the changes to the ECs and ICs if any, and (b) whether the program for maintenance and monitoring is being implemented in accordance with the SMP. Mr. Wagdi Abdelshahid of ATC initially conducted the annual site inspection on February 28, 2011 under direct supervision of Mr. Gilbert Gedeon, PE. ATC was accompanied by Mr. Anthony Mariano, the school's custodian.

At the request of NYSDEC, Mr. Gilbert Gedeon, PE and Mr. Wagdi Abdelshahid revisited the site on September 20 and 21, 2011 to provide the custodial staff refresher training as it relates to operation and maintenance of the ECs and ICs at the site, and updated this SMR accordingly. The custodial staff that received the training included Mr. Francis Jean of the Division of School Facilities (DSF), Mr. Anthony Mariano (Custodian), Mr. Jamie Rivero (Handyman) and Albert Andreano (Handyman).

## **2.0 ENGINEERING CONTROLS**

According to the SMP prepared by Shaw Environmental Inc. (Shaw), dated November 2008, the Mott Haven Campus (X790) contains engineering controls that include a Gas Vapor Barrier and a SSDS constructed beneath the school to prevent residual soil vapors from entering the Mott Haven Campus 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 program for maintenance and monitoring was developed to ensure that the ECs remain effective.

### **2.1 Vapor Barrier**

The vapor barrier was installed beneath the school buildings as a preventative measure to prevent soil vapors from entering the buildings in the future. The vapor barrier is applied underneath the buildings' ground floor slabs.

## **2.2    Sub-Slab Depressurization System**

A sub-slab depressurization system was installed at the school as an added safeguard to prevent soil vapors from entering the school buildings in the future. The primary components of the SSDS are gas permeable aggregate (GPA) and schedule 80 PVC piping located beneath the school, schedule 40 steel riser piping through building chase spaces from the ground floor slab to the roof, and stainless steel ductwork connecting the steel SSDS piping to the roof top fans.

## **2.3    Composite Cover System**

A composite cover system was also installed on the school campus and below the platform to the north of the property to prevent school occupants from exposure to the underlying soils. This composite cover system is comprised of school buildings (concrete foundation), asphalt pavement, concrete sidewalks, concrete cap below platform, artificial turf on athletic fields, or two feet of clean fill on all exposed ground surfaces.

## **3.0    INSTITUTIONAL CONTROLS**

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

- Comply with the Environmental Easement and 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 concrete building slabs, asphalt pavement, concrete covered sidewalks, and artificial turf athletic field, or two feet of clean fill on all exposed ground surfaces including landscaped areas in the BCP Area and Non-BCP Area A as required by the SMP;
- Inspect the cover system consisting of a concrete cap on all exposed ground surfaces beneath PS 156 and IS 151 to prevent human exposure to underlying soils remaining under Non-BCP Area B;
- Operate, inspect, maintain, and certify the soil vapor mitigation system consisting of a SSDS and vapor barrier under all building structures (BCP Area and Non-BCP Area A) as required;
- Inspect and certify all ECs at a frequency and in a manner defined in the SMP;
- Perform groundwater monitoring as stated 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 on-site monitoring devices as necessary to ensure the devices function in the manner specified in the SMP;
- Refrain from discontinuing the ECs without an amendment or the extinguishment of the Environmental Easement or DCR and approval by NYSDEC and NYSDOH;
- 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 historic urban fill material (Non-BCP Area A and Non BCP Area B) unless conducted as defined in the soil management provisions of the SMP;
- Use the Property as a school campus 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 Environmental Easement and 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 find 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 September 2010 to August 2011:

1. Several incidents regarding the malfunctioning and respective repairs of the SSDS rooftop fan units were noted and are summarized below in Section 4.1.2;
2. All Monthly Inspection Forms (except for September and October 2010) indicate that the Building Management System (BMS) indicator lights were functioning; however, the BMS was still not properly programmed; and
3. Monthly Inspection Forms from September 2010 to March 2011 indicate signs of vehicular use on the unpaved areas with no damage reported.

The Monthly Inspection Forms are included in Attachment 2.

###### **4.1.2 *Review of Shaw's Biweekly Inspection Logs***

ATC reviewed the biweekly logs prepared by Shaw from September 14, 2010 to August 5, 2011. These inspections were conducted by Shaw as the BMS is not connected to the SSDS. These reports present the activity performed by Mr. Peter Helseth and Mr. David Greffenius of Shaw during their biweekly inspections of the SSDS until the BMS is connected (See Attachment 3). Based on this review, ATC noted that all six (6) SSDS fan units were operating properly except for certain incidents indicated in the table below:

Date of Incident	Fan Units	Issue	Corrective Measures	Date Corrected
January 19, 2011	EF-2, EF-6	Power to fan units improperly spliced	Wires reconnected by an Electrician	January 19, 2011
May 10, 2011	Unknown	Fan belt in poor condition	Fan belt replaced by Custodian	Week of May 10, 2011
May 24 to May 27, 2011	EF-1, EF-2, EF-4, EF-6	Fans not operating	Turned circuit breaker switch to the "HAND" position from the "AUTO" position.	May 27, 2011
June 7, 2011	Unknown	Fan belt misaligned	Fan belt realigned	June 7, 2011
June 21, 2011	EF-1, EF-5	Fan belts frayed	Fan belts replaced	June 21, 2011
July 8, 2011	EF-3	Fan belt frayed	Fan belt replaced	July 12, 2011

On January 5<sup>th</sup> Shaw did not have access to four (4) fan units. During the following biweekly inspection conducted on January 19, 2011, Shaw observed that two (2) fans were not operating properly. As a result, an electrician was called in and repaired the electrical problem. On May 10<sup>th</sup>, one (1) SSDS fan unit was operating at a lower capacity. Subsequently, the fan belt was replaced and the fan was operating at normal capacity. From May 24 to May 27 four (4) fan units were not operational due to setting the circuit breaker to automatic power shutdown; this was corrected by switching to manual shutoff. On June 7<sup>th</sup>, one (1) fan unit was not operating properly; therefore, the belt was realigned by the custodian to correct the issue. On June 21<sup>st</sup>, Shaw observed that two (2) fans were not running properly, but this was fixed by replacing the fan belts on both. A similar issue was corrected on July 8<sup>th</sup>, when one (1) SSDS fan unit was not functioning normally. ATC concludes that all reported operational incidents were promptly addressed.

### 4.1.3 Review of Shaw's Semiannual Groundwater Monitoring Reports

The Site is currently undergoing a semiannual groundwater monitoring program until the upgradient contamination source is addressed. ATC reviewed the last two groundwater monitoring reports (Attachment 4) prepared by Shaw for the September 2010 and March 2011 groundwater sampling events as follows:

#### *September 2010 Sampling Event*

On June 11, 2010, monitoring wells MW-3A, MW-5A and MW-11A were decommissioned in accordance with the NYSDEC. Replacement wells MW-3R and MW-5R were installed by Aquifer Drilling & Testing (ADT) on August 27, 2010. The third and final replacement monitoring well MW-11R was installed using identical drilling and construction methods on September 18, 2010.



On September 25, 2010 Shaw collected ground water samples from the seven (7) groundwater monitoring wells. These samples were submitted to Chemtech Environmental Laboratory. No VOCs were detected in the groundwater samples from MW-5R and MW-11R. Three (3) VOCs were detected from the third downgradient monitoring well, MW-3R. None of the three VOCs exceed New York State Class GA standards. No VOCs in monitoring wells MW-24, MW-25 and MW-26. Two (2) VOCs were detected in monitoring well MW-23 and of the two, vinyl chloride exceeds the New York State Class GA standard.

### ***March 2011 Sampling Event***

On March 12, 2011 Shaw collected ground water samples from the seven (7) groundwater monitoring wells. These samples were submitted to Chemtech Environmental Laboratory. No VOCs were detected in two (2) of the three (3) downgradient monitoring wells (MW-5R and MW-11R). Three (3) VOCs were detected in the groundwater samples from MW-3R. None of the three VOCs exceed New York State Class GA standards. Two (2) VOCs were detected from MW-25 which were found not to exceed New York State Class GA standards. No VOCs were detected in the groundwater samples from monitoring well MW-26R. Two (2) VOCs were detected from MW-23. Vinyl chloride exceeds New York State Class GA standards. The two (2) VOCs detected from monitoring well MW-23 are not related to the contaminant sources identified during the RI. Three (3) VOCs were detected the groundwater samples collected from MW-24. PCE exceeds the New York State Class GA standards, however the other two (2) VOCs do not.

The remedial objective for groundwater in the NYSDEC-approved Remedial Action Work Plan (RAWP) is to maintain groundwater quality at the downgradient property line. The groundwater monitoring results demonstrate that the remedial objective for groundwater continues to be met per the RAWP.

## **4.2 ATC's Visual Observations**

On September 20 and 21, 2011, ATC conducted visual observations and photographic documentation while accompanied by the custodial staff. Site photographs are included Attachment 5 and the Annual Inspection Form is included in Attachment 6. 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 is not available at the school but is being ordered.

### ***4.2.1 Roof Vent SSDS Inspection***

1. The SSDS blowers and stacks are located on the top of the roof of Buildings A, B, C, and D as follows:
  - ***Buildings A & B*** roofs have two fans each: one on the top of the main roof and the other on the top of the mechanical room roof
  - ***Buildings C & D*** roofs have one fan each: on the top of the mechanical room roof.
2. All SSDS fan units were operational;

3. Rust or other debris in the vicinity of the post and sleeve at SSDS Stacks was not observed;
4. All fan stack guide wires, fan mounting and vibration isolators were intact; and
5. All fan belts were aligned and in good condition, except for EF-2 which had a broken belt and was replaced on the same day.

#### **4.2.2 Basement Inspection (Cellar)**

ATC inspected the accessible areas of the basement floors. ATC did not observe any visible concrete cracks penetrating into the basement floor during the annual inspection. Furthermore, ATC did not observe any floor joints in the basement floor. As such, smoke testing was not conducted. 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 observed construction activities in support of drainage improvement in the DOT maintenance corridor located west of the site (adjacent to but outside of the building footprint). As per a letter dated September 26, 2011 from Shaw to the SCA, there was no disturbance of the vapor barrier or underlying fill material during construction (See Attachment 7).

#### **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 did not observe any visible cracks in the exterior paved areas or sidewalks during the annual inspection. ATC also inspected the artificial turf and observed no apparent holes, cracks or deterioration.

### **5.0 CONCLUSIONS AND RECOMMENDATIONS**

Based on visual observations, ATC concludes the following:

1. The SSDS is operational. Bi-weekly SSDS inspections are being performed to verify operation of the SSDS and work on connecting the BMS is continuing;
2. No visible concrete cracks penetrating into the basement floors or walls were observed during the annual inspection; therefore, no smoke testing was performed;
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. Site usage is compliant with the environmental easement.

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

1. Continue biweekly SSDS inspections until the BMS is properly connected and programmed;
2. Provide a spare fan unit at all times as per SMP;
3. Continue documenting all operation and maintenance activities on ECs; and
4. Conduct preventative maintenance and document accordingly.

## **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, site documents review and real-time environmental measurements. 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.**



Gilbert Gedeon, PE  
Division Manager

cc: Y. Efstathiou

**Attachment 1**  
**NYSDEC Comments**

## Gil Gedeon

---

**From:** Orlan Bernard <BOrlan@schools.nyc.gov>  
**Sent:** Tuesday, August 09, 2011 8:50 AM  
**To:** Gil Gedeon  
**Subject:** FW: Motthaven Annual Site Management Report

DEC comments

---

**From:** Jennifer Kann [mailto:jkkann@gw.dec.state.ny.us]  
**Sent:** Monday, August 08, 2011 5:35 PM  
**To:** Guterman Deborah; Orlan Bernard  
**Cc:** Vadim Brevdo; msherwood@trcsolutions.com  
**Subject:** Motthaven Annual Site Management Report

Bernard/Lee-

The Department has reviewed the Annual Site Management Report, Motthaven Campus (Report), dated March 22, 2011 and prepared by ATC. Comments on the Report are as follows:

-All annual reports must be submitted the Department and placed in repositories by March 1 and must be signed and sealed by a registered NYSPE.

-Section 5.1 of the Site Management Plan (SMP) states that the Report should include "an evaluation of the Engineering and Institutional Controls and the monitoring plan for adequacy in meeting remedial goals." The Report did not include any statements from ATC's NYSPE confirming that remedial goals were being met.

-An annual smoke test is required as per 3.2.2 of the SMP. This was not performed.

-Groundwater sampling results must be included in the Report as stated in Section 3.7 of the SMP, as well as an evaluation and discussion of the results.

-The Annual Inspection checklist (found in Attachment 2 of the Report) indicates that there is "no BMS connected". In our August 5 meeting, DOE indicated that bi-weekly inspections were being performed to ensure that the SSDS was operating, since the BMS was not yet connected. Please provide a detailed discussion including, but not limited to, information regarding who is performing these inspections, what documentation is available from these inspections and whether or not any problems were noted.

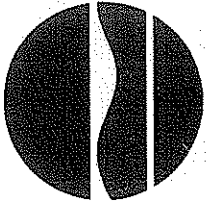
In addition, all recommendations identified in the Report should be addressed.

If you have any questions, please let me know.

-Jennifer

Jennifer Kann

Environmental Engineer  
NYSDEC  
47-40 21st Street  
Long Island City, NY 11101  
718.482.4977



New York State Department of Environmental Conservation  
Petroleum Remediation Section  
Division of Environmental Remediation, Region 2

Phone: (718) 482-4995 FAX: (718) 482-6358

Website: [www.dec.state.ny.us](http://www.dec.state.ny.us)

Subject: Mott Haven Location: NYSDEC Region 2 Office, Long Island City, NY DATE: Aug. 5, 2011

BCP site

ATTENDANCE RECORD

Name	Representing	E-Mail Address	Telephone Number
Vadim Brevdo	NYSDEC	vxbrevdo@gw.dec.state.ny.us	(718) 482-4928
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Lee Guterman	SCA/IEH	dguterman@nysca.org	718 - 472-8502
BERNARD POLLAN	NYS DEC	BORLANC@schools.nyc.gov	
Gilbert Green	ATC	green15@dec-environment.org	212-333-8182

**Attachment 2**  
**Custodian Monthly or Severe Condition Inspection Forms**



**Monthly/Severe Condition Inspection Form**

**Mott Haven Campus  
730 Concourse Village West, Bronx, New York 10451**

Inspector's Name: \_\_\_\_\_  
 Inspection Date: 9/4/10  
 Inspection Time: 7:30 A.M.  
 Comments: \_\_\_\_\_

Weather Conditions: Clear  
 Air Temperature (°F): 72°

**A. SSDS SYSTEM INSPECTION**

**1. Walk the entire roof surface of school buildings.**

- \* Inspect fan stack guide wires. ☒
- \* Inspect fan mounting and vibration isolators. ☒
- \* Inspect condition of fan belt. ☒
- \* Inspect alignment of fan belt. ☒
- \* Record vacuum gauge reading: \_\_\_\_\_
- \* Inspect bolts and set screws for tightness and rusty condition. ☒
- \* Inspect for cleanliness. Clean exterior surfaces only. Remove dust and grease on motor housing. ☒
- \* Are the indicator lights on the Building Management System functioning properly? ☒
- \* Confirm that spare fan is stored in designated secure location and in working condition. ☒
- \* Confirm that the spare fan's bearings are completely filled with grease/lubricant. ☒
- \* Rotate the fan wheel of the spare fan several times to ensure that bearings remain lubricated. ☒
- \* Comments (see or hear anything unusual?): None

**B. COVER SYSTEM - BOTTOM FLOOR INSPECTION**

**1. Walk all of the bottom floors**

- \* Any visible cracks or depressions in the ground floors? ☒
- \* Any other visible openings (unintended) in the ground floors? ☒
- \* Draw approximate location of floor cracks/openings on site map. ☒
- \* Note the length of the crack/opening. ☒
- \* Note the width of the crack/opening. ☒
- \* Comments: None

**C. COVER SYSTEM - EXTERIOR INSPECTION**

- 1. Walk and inspect the entire perimeter of the Site.**
- 2. Walk and inspect all of the paved areas (concrete and asphalt) of the Site.**
- 3. Walk and inspect all of the unpaved areas of the Site including artificial turf field.**

- \* Are there any signs of significant cracks, settlement, or deterioration of the paved areas? ☒
- \* Has any of the pavement material been removed? ☒
- \* Are there signs of vehicular use on the unpaved areas (tire tracks, rutting, etc.)? ☒
- \* Have any structures been constructed on the unpaved areas? ☒
- \* Are there any signs of soil washing or erosion (gullies, soil washed out onto the pavement)? ☒
- \* Are there any signs of intrusive activities (drilling, digging, trenching, grading, excavating, etc.)? ☒
- \* Comments: \_\_\_\_\_

**D. REPAIRS**

Summarize needed/completed repairs to Engineering Controls:

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Inspector's Signature: Anthony J. Spina

**Monthly/Severe Condition Inspection Form**

**Mott Haven Campus  
730 Concourse Village West, Bronx, New York 10451**

Inspector's Name: Anthony Martinez  
 Inspection Date: 10/16/10  
 Inspection Time: 7:30 A.M.  
 Comments:

Weather Conditions: Clear ✓  
 Air Temperature (°F): 51°

**A. SSDS SYSTEM INSPECTION**

**1. Walk the entire roof surface of school buildings.**

- \* Inspect fan stack guide wires. ✓
- \* Inspect fan mounting and vibration isolators. ✓
- \* Inspect condition of fan belt. ✓
- \* Inspect alignment of fan belt. ✓
- \* Record vacuum gauge reading: ✓
- \* Inspect bolts and set screws for tightness and rusty condition. ✓
- \* Inspect for cleanliness. Clean exterior surfaces only. Remove dust and grease on motor housing. ✓
- \* Are the indicator lights on the Building Management System functioning properly? ✓
- \* Confirm that spare fan is stored in designated secure location and in working condition. ✓
- \* Confirm that the spare fan's bearings are completely filled with grease/lubricant. ✓
- \* Rotate the fan wheel of the spare fan several times to ensure that bearings remain lubricated. ✓
- \* Comments (see or hear anything unusual?): NO

**B. COVER SYSTEM - BOTTOM FLOOR INSPECTION**

**1. Walk all of the bottom floors**

- \* Any visible cracks or depressions in the ground floors? ✓
- \* Any other visible openings (unintended) in the ground floors? ✓
- \* Draw approximate location of floor cracks/openings on site map. ✓
- \* Note the length of the crack/opening. ✓
- \* Note the width of the crack/opening. none
- \* Comments:

**C. COVER SYSTEM - EXTERIOR INSPECTION**

- 1. Walk and inspect the entire perimeter of the Site.**
- 2. Walk and inspect all of the paved areas (concrete and asphalt) of the Site.**
- 3. Walk and inspect all of the unpaved areas of the Site including artificial turf field.**

- \* Are there any signs of significant cracks, settlement, or deterioration of the paved areas? N
- \* Has any of the pavement material been removed? N
- \* Are there signs of vehicular use on the unpaved areas (tire tracks, rutting, etc.)? N
- \* Have any structures been constructed on the unpaved areas? N
- \* Are there any signs of soil washing or erosion (gullies, soil washed out onto the pavement)? N
- \* Are there any signs of intrusive activities (drilling, digging, trenching, grading, excavating, etc.)? N
- \* Comments:

**D. REPAIRS**

Summarize needed/completed repairs to Engineering Controls:

Inspector's Signature: Anthony Martinez

**Monthly/Severe Condition Inspection Form**

**Mott Haven Campus**

**730 Concourse Village West, Bronx, New York 10451**

Inspector's Name: Anthony Marino

Weather Conditions: Clear

Inspection Date: 12/18/13

Air Temperature (°F): 25°F

Inspection Time: 8:00 A.M.

Comments:

**A. SSDS SYSTEM INSPECTION**

**1. Walk the entire roof surface of school buildings.**

- \* Inspect fan stack guide wires. ☒
- \* Inspect fan mounting and vibration isolators. ☒
- \* Inspect condition of fan belt. ☒
- \* Inspect alignment of fan belt. ☒
- \* Record vacuum gauge reading: ☒
- \* Inspect bolts and set screws for tightness and rusty condition. ☒
- \* Inspect for cleanliness. Clean exterior surfaces only. Remove dust and grease on motor housing. ☒
- \* Are the indicator lights on the Building Management System functioning properly? ☒
- \* Confirm that spare fan is stored in designated secure location and in working condition. ☒
- \* Confirm that the spare fan's bearings are completely filled with grease/lubricant. ☒
- \* Rotate the fan wheel of the spare fan several times to ensure that bearings remain lubricated. ☒
- \* Comments (see or hear anything unusual?): NO

**B. COVER SYSTEM - BOTTOM FLOOR INSPECTION**

**1. Walk all of the bottom floors**

- \* Any visible cracks or depressions in the ground floors? ☒
- \* Any other visible openings (unintended) in the ground floors? ☒
- \* Draw approximate location of floor cracks/openings on site map. ☒
- \* Note the length of the crack/opening. ☒
- \* Note the width of the crack/opening. ☒
- \* Comments: None

**C. COVER SYSTEM - EXTERIOR INSPECTION**

- 1. Walk and inspect the entire perimeter of the Site.**
- 2. Walk and inspect all of the paved areas (concrete and asphalt) of the Site.**
- 3. Walk and inspect all of the unpaved areas of the Site including artificial turf field.**

- \* Are there any signs of significant cracks, settlement, or deterioration of the paved areas? ☒
- \* Has any of the pavement material been removed? ☒
- \* Are there signs of vehicular use on the unpaved areas (tire tracks, rutting, etc.)? ☒
- \* Have any structures been constructed on the unpaved areas? ☒
- \* Are there any signs of soil washing or erosion (gullies, soil washed out onto the pavement)? ☒
- \* Are there any signs of intrusive activities (drilling, digging, trenching, grading, excavating, etc.)? ☒
- \* Comments:

**D. REPAIRS**

Summarize needed/completed repairs to Engineering Controls:

Inspector's Signature: Anthony Marino

**Monthly/Severe Condition Inspection Form**

**Mott Haven Campus  
730 Concourse Village West, Bronx, New York 10451**

Inspector's Name: Anthony Mariano Weather Conditions: Clear  
 Inspection Date: 1/22/11 Air Temperature (°F): 14°F  
 Inspection Time: 7:30 AM  
 Comments: On 1/19/11 EF2 & EF6 were not running

**A. SSDS SYSTEM INSPECTION**

**1. Walk the entire roof surface of school buildings.**

- \* Inspect fan stack guide wires. ☒
- \* Inspect fan mounting and vibration isolators. ☒
- \* Inspect condition of fan belt. ☒
- \* Inspect alignment of fan belt. ☒
- \* Record vacuum gauge reading: ☐
- \* Inspect bolts and set screws for tightness and rusty condition. ☒
- \* Inspect for cleanliness. Clean exterior surfaces only. Remove dust and grease on motor housing. ☒
- \* Are the indicator lights on the Building Management System functioning properly? ☒
- \* Confirm that spare fan is stored in designated secure location and in working condition. ☒
- \* Confirm that the spare fan's bearings are completely filled with grease/lubricant. ☒
- \* Rotate the fan wheel of the spare fan several times to ensure that bearings remain lubricated. ☒
- \* Comments (see or hear anything unusual?): NO

**B. COVER SYSTEM - BOTTOM FLOOR INSPECTION**

**1. Walk all of the bottom floors**

- \* Any visible cracks or depressions in the ground floors? ☒
- \* Any other visible openings (unintended) in the ground floors? ☒
- \* Draw approximate location of floor cracks/openings on site map. ☒
- \* Note the length of the crack/opening. ☒
- \* Note the width of the crack/opening. None
- \* Comments:

**C. COVER SYSTEM - EXTERIOR INSPECTION**

- 1. Walk and inspect the entire perimeter of the Site.**
- 2. Walk and inspect all of the paved areas (concrete and asphalt) of the Site.**
- 3. Walk and inspect all of the unpaved areas of the Site including artificial turf field.**

- \* Are there any signs of significant cracks, settlement, or deterioration of the paved areas? N
- \* Has any of the pavement material been removed? N
- \* Are there signs of vehicular use on the unpaved areas (tire tracks, rutting, etc.)? Y
- \* Have any structures been constructed on the unpaved areas? N
- \* Are there any signs of soil washing or erosion (gullies, soil washed out onto the pavement)? N
- \* Are there any signs of intrusive activities (drilling, digging, trenching, grading, excavating, etc.)? N
- \* Comments:

**D. REPAIRS**

Summarize needed/completed repairs to Engineering Controls:

Inspector's Signature: Anthony Mariano

Monthly/Severe Condition Inspection Form	
<b>Mott Haven Campus</b> <b>730 Concourse Village West, Bronx, New York 10451</b>	
Inspector's Name: <u>Anthony Maxia</u>	Weather Conditions: <u>clear</u>
Inspection Date: <u>2/26/11</u>	Air Temperature (°F): <u>31°F</u>
Inspection Time: <u>7:30 AM</u>	
Comments: _____	
<b>A. SSDS SYSTEM INSPECTION</b>	
<b>1. Walk the entire roof surface of school buildings.</b>	
<ul style="list-style-type: none"> <li>* Inspect fan stack guide wires. _____</li> <li>* Inspect fan mounting and vibration isolators. <u>✓</u></li> <li>* Inspect condition of fan belt. <u>✓</u></li> <li>* Inspect alignment of fan belt. <u>✓</u></li> <li>* Record vacuum gauge reading: <u>✓</u></li> <li>* Inspect bolts and set screws for tightness and rusty condition. <u>✓</u></li> <li>* Inspect for cleanliness. Clean exterior surfaces only. Remove dust and grease on motor housing. <u>✓</u></li> <li>* Are the indicator lights on the Building Management System functioning properly? <u>✓</u></li> <li>* Confirm that spare fan is stored in designated secure location and in working condition. <u>✓</u></li> <li>* Confirm that the spare fan's bearings are completely filled with grease/lubricant. <u>✓</u></li> <li>* Rotate the fan wheel of the spare fan several times to ensure that bearings remain lubricated. <u>✓</u></li> <li>* Comments (see or hear anything unusual?): <u>NO</u></li> </ul>	
<b>B. COVER SYSTEM - BOTTOM FLOOR INSPECTION</b>	
<b>1. Walk all of the bottom floors</b>	
<ul style="list-style-type: none"> <li>* Any visible cracks or depressions in the ground floors? <u>✓</u></li> <li>* Any other visible openings (unintended) in the ground floors? <u>✓</u></li> <li>* Draw approximate location of floor cracks/openings on site map. <u>✓</u></li> <li>* Note the length of the crack/opening. <u>✓</u></li> <li>* Note the width of the crack/opening. <u>None</u></li> <li>* Comments: _____</li> </ul>	
<b>C. COVER SYSTEM - EXTERIOR INSPECTION</b>	
<b>1. Walk and inspect the entire perimeter of the Site.</b>	
<b>2. Walk and inspect all of the paved areas (concrete and asphalt) of the Site.</b>	
<b>3. Walk and inspect all of the unpaved areas of the Site including artificial turf field.</b>	
<ul style="list-style-type: none"> <li>* Are there any signs of significant cracks, settlement, or deterioration of the paved areas? <u>N</u></li> <li>* Has any of the pavement material been removed? <u>N</u></li> <li>* Are there signs of vehicular use on the unpaved areas (tire tracks, rutting, etc.)? <u>Y</u></li> <li>* Have any structures been constructed on the unpaved areas? <u>H</u></li> <li>* Are there any signs of soil washing or erosion (gullies, soil washed out onto the pavement)? <u>N</u></li> <li>* Are there any signs of intrusive activities (drilling, digging, trenching, grading, excavating, etc.)? <u>N</u></li> <li>* Comments: _____</li> </ul>	
<b>D. REPAIRS</b>	
Summarize needed/completed repairs to Engineering Controls: _____ _____ _____ _____	
Inspector's Signature: <u>Anthony Maxia</u>	

**Monthly/Severe Condition Inspection Form**

**Mott Haven Campus  
730 Concourse Village West, Bronx, New York 10451**

Inspector's Name: Anthony Jax 1940

Weather Conditions: clear

Inspection Date: 3/26/11

Air Temperature (°F): 26°F - C

Inspection Time: 7:30 AM

Comments:

**A. SSDS SYSTEM INSPECTION**

**1. Walk the entire roof surface of school buildings.**

- \* Inspect fan stack guide wires.
- \* Inspect fan mounting and vibration isolators. ✓
- \* Inspect condition of fan belt. ✓
- \* Inspect alignment of fan belt. ✓
- \* Record vacuum gauge reading:
- \* Inspect bolts and set screws for tightness and rusty condition. ✓
- \* Inspect for cleanliness. Clean exterior surfaces only. Remove dust and grease on motor housing. ✓
- \* Are the indicator lights on the Building Management System functioning properly? ✓
- \* Confirm that spare fan is stored in designated secure location and in working condition. ✓
- \* Confirm that the spare fan's bearings are completely filled with grease/lubricant. ✓
- \* Rotate the fan wheel of the spare fan several times to ensure that bearings remain lubricated. ✓
- \* Comments (see or hear anything unusual?): NO

**B. COVER SYSTEM - BOTTOM FLOOR INSPECTION**

**1. Walk all of the bottom floors**

- \* Any visible cracks or depressions in the ground floors? ✓
- \* Any other visible openings (unintended) in the ground floors? ✓
- \* Draw approximate location of floor cracks/openings on site map. ✓
- \* Note the length of the crack/opening. ✓
- \* Note the width of the crack/opening. None
- \* Comments:

**C. COVER SYSTEM - EXTERIOR INSPECTION**

- 1. Walk and inspect the entire perimeter of the Site.**
- 2. Walk and inspect all of the paved areas (concrete and asphalt) of the Site.**
- 3. Walk and inspect all of the unpaved areas of the Site including artificial turf field.**

- \* Are there any signs of significant cracks, settlement, or deterioration of the paved areas? H
- \* Has any of the pavement material been removed? N
- \* Are there signs of vehicular use on the unpaved areas (tire tracks, rutting, etc.)? N
- \* Have any structures been constructed on the unpaved areas? N
- \* Are there any signs of soil washing or erosion (gullies, soil washed out onto the pavement)? N
- \* Are there any signs of intrusive activities (drilling, digging, trenching, grading, excavating, etc.)? N
- \* Comments:

**D. REPAIRS**

Summarize needed/completed repairs to Engineering Controls:

Inspector's Signature: Anthony Jax

**Monthly/Severe Condition Inspection Form**

**Mott Haven Campus  
730 Concourse Village West, Bronx, New York 10451**

Inspector's Name: Anthony Mariano

Weather Conditions:

Inspection Date: 4/23/11

Air Temperature (°F): 45° F cloudy

Inspection Time: 7:36 AM

Comments: Broken blades (fan)

**A. SSDS SYSTEM INSPECTION**

**1. Walk the entire roof surface of school buildings.**

- \* Inspect fan stack guide wires. ☒
- \* Inspect fan mounting and vibration isolators. ☒
- \* Inspect condition of fan belt. ☒
- \* Inspect alignment of fan belt. ☒
- \* Record vacuum gauge reading: ☐
- \* Inspect bolts and set screws for tightness and rusty condition. ☒
- \* Inspect for cleanliness. Clean exterior surfaces only. Remove dust and grease on motor housing. ☒
- \* Are the Indicator lights on the Building Management System functioning properly? ☒
- \* Confirm that spare fan is stored in designated secure location and in working condition. ☒
- \* Confirm that the spare fan's bearings are completely filled with grease/lubricant. ☒
- \* Rotate the fan wheel of the spare fan several times to ensure that bearings remain lubricated. ☒
- \* Comments (see or hear anything unusual?): NO

**B. COVER SYSTEM - BOTTOM FLOOR INSPECTION**

**1. Walk all of the bottom floors**

- \* Any visible cracks or depressions in the ground floors? ☒
- \* Any other visible openings (unintended) in the ground floors? ☒
- \* Draw approximate location of floor cracks/openings on site map. ☒
- \* Note the length of the crack/opening. ☒
- \* Note the width of the crack/opening. None
- \* Comments:

**C. COVER SYSTEM - EXTERIOR INSPECTION**

- 1. Walk and inspect the entire perimeter of the Site.**
- 2. Walk and inspect all of the paved areas (concrete and asphalt) of the Site.**
- 3. Walk and inspect all of the unpaved areas of the Site including artificial turf field.**

- \* Are there any signs of significant cracks, settlement, or deterioration of the paved areas? N
- \* Has any of the pavement material been removed? N
- \* Are there signs of vehicular use on the unpaved areas (tire tracks, rutting, etc.)? N
- \* Have any structures been constructed on the unpaved areas? N
- \* Are there any signs of soil washing or erosion (gullies, soil washed out onto the pavement)? N
- \* Are there any signs of intrusive activities (drilling, digging, trenching, grading, excavating, etc.)? N
- \* Comments:

**D. REPAIRS**

Summarize needed/completed repairs to Engineering Controls:

Inspector's Signature: Anthony Mariano

Monthly/Severe Condition Inspection Form	
Mott Haven Campus 730 Concourse Village West, Bronx, New York 10451	
Inspector's Name: <u>Anthony Marino</u>	Weather Conditions:
Inspection Date: <u>5/21/11</u>	Air Temperature (°F): <u>56-0F clear</u>
Inspection Time: <u>11:00 AM</u>	
Comments: <u>Bldg. C - broken belt</u>	
<b>A. SSDS SYSTEM INSPECTION</b>	
1. Walk the entire roof surface of school buildings.	
* Inspect fan stack guide wires.	✓
* Inspect fan mounting and vibration isolators.	✓
* Inspect condition of fan belt.	✓
* Inspect alignment of fan belt.	
* Record vacuum gauge reading:	✓
* Inspect bolts and set screws for tightness and rusty condition.	✓
* Inspect for cleanliness. Clean exterior surfaces only. Remove dust and grease on motor housing.	
* Are the indicator lights on the Building Management System functioning properly?	✓
* Confirm that spare fan is stored in designated secure location and in working condition.	✓
* Confirm that the spare fan's bearings are completely filled with grease/lubricant.	✓
* Rotate the fan wheel of the spare fan several times to ensure that bearings remain lubricated.	✓
* Comments (see or hear anything unusual?):	NO
<b>B. COVER SYSTEM - BOTTOM FLOOR INSPECTION</b>	
1. Walk all of the bottom floors	
* Any visible cracks or depressions in the ground floors?	✓
* Any other visible openings (unintended) in the ground floors?	✓
* Draw approximate location of floor cracks/openings on site map.	✓
* Note the length of the crack/opening.	✓
* Note the width of the crack/opening.	None
* Comments:	
<b>C. COVER SYSTEM - EXTERIOR INSPECTION</b>	
1. Walk and inspect the entire perimeter of the Site.	
2. Walk and inspect all of the paved areas (concrete and asphalt) of the Site.	
3. Walk and inspect all of the unpaved areas of the Site including artificial turf field.	
* Are there any signs of significant cracks, settlement, or deterioration of the paved areas?	N
* Has any of the pavement material been removed?	N
* Are there signs of vehicular use on the unpaved areas (tire tracks, rutting, etc.)?	N
* Have any structures been constructed on the unpaved areas?	N
* Are there any signs of soil washing or erosion (gullies, soil washed out onto the pavement)?	N
* Are there any signs of intrusive activities (drilling, digging, trenching, grading, excavating, etc.)?	N
* Comments:	
<b>D. REPAIRS</b>	
Summarize needed/completed repairs to Engineering Controls:	
Inspector's Signature: <u>Anthony Marino</u>	



**Monthly/Severe Condition Inspection Form**

**Mott Haven Campus  
730 Concourse Village West, Bronx, New York 10451**

Inspector's Name: Anthony Marzano

Weather Conditions: cloudy

Inspection Date: 6/25/11

Air Temperature (°F): 64°F

Inspection Time: 7:30 AM

Comments: Bldg. B - broken belt.

**A. SSDS SYSTEM INSPECTION**

**1. Walk the entire roof surface of school buildings.**

- \* Inspect fan stack guide wires. ☒
- \* Inspect fan mounting and vibration isolators. ☒
- \* Inspect condition of fan belt. ☒
- \* Inspect alignment of fan belt. ☒
- \* Record vacuum gauge reading: ☒
- \* Inspect bolts and set screws for tightness and rusty condition. ☒
- \* Inspect for cleanliness. Clean exterior surfaces only. Remove dust and grease on motor housing. ☒
- \* Are the Indicator lights on the Building Management System functioning properly? ☒
- \* Confirm that spare fan is stored in designated secure location and in working condition. ☒
- \* Confirm that the spare fan's bearings are completely filled with grease/lubricant. ☒
- \* Rotate the fan wheel of the spare fan several times to ensure that bearings remain lubricated. ☒
- \* Comments (see or hear anything unusual?): NO

**B. COVER SYSTEM - BOTTOM FLOOR INSPECTION**

**1. Walk all of the bottom floors**

- \* Any visible cracks or depressions in the ground floors? ☒
- \* Any other visible openings (unintended) in the ground floors? ☒
- \* Draw approximate location of floor cracks/openings on site map. ☒
- \* Note the length of the crack/opening. ☒
- \* Note the width of the crack/opening. ☒
- \* Comments: None

**C. COVER SYSTEM - EXTERIOR INSPECTION**

- 1. Walk and inspect the entire perimeter of the Site.**
- 2. Walk and inspect all of the paved areas (concrete and asphalt) of the Site.**
- 3. Walk and inspect all of the unpaved areas of the Site including artificial turf field.**

- \* Are there any signs of significant cracks, settlement, or deterioration of the paved areas? ☒
- \* Has any of the pavement material been removed? ☒
- \* Are there signs of vehicular use on the unpaved areas (tire tracks, rutting, etc.)? ☒
- \* Have any structures been constructed on the unpaved areas? ☒
- \* Are there any signs of soil washing or erosion (gullies, soil washed out onto the pavement)? ☒
- \* Are there any signs of intrusive activities (drilling, digging, trenching, grading, excavating, etc.)? ☒
- \* Comments:

**D. REPAIRS**

Summarize needed/completed repairs to Engineering Controls:

Inspector's Signature: Anthony Marzano

**Monthly/Severe Condition Inspection Form**

**Mott Haven Campus  
730 Concourse Village West, Bronx, New York 10451**

Inspector's Name: Anthony Mariano

Weather Conditions: Clear

Inspection Date: 7/30/11

Air Temperature (°F): 73°F

Inspection Time:

Comments: 8/19/11 Replaced belt in Bltgr. B - SSDS  
Fan - Pulley problems

**A. SSDS SYSTEM INSPECTION**

**1. Walk the entire roof surface of school buildings.**

- \* Inspect fan stack guide wires. ☒
- \* Inspect fan mounting and vibration isolators. ☒
- \* Inspect condition of fan belt. ☒
- \* Inspect alignment of fan belt. ☒
- \* Record vacuum gauge reading: ☒
- \* Inspect bolts and set screws for tightness and rusty condition. ☒
- \* Inspect for cleanliness. Clean exterior surfaces only. Remove dust and grease on motor housing. ☒
- \* Are the indicator lights on the Building Management System functioning properly? ☒
- \* Confirm that spare fan is stored in designated secure location and in working condition. ☒
- \* Confirm that the spare fan's bearings are completely filled with grease/lubricant. ☒
- \* Rotate the fan wheel of the spare fan several times to ensure that bearings remain lubricated. ☒
- \* Comments (see or hear anything unusual?): No

**B. COVER SYSTEM - BOTTOM FLOOR INSPECTION**

**1. Walk all of the bottom floors**

- \* Any visible cracks or depressions in the ground floors? ☒
- \* Any other visible openings (unintended) in the ground floors? ☒
- \* Draw approximate location of floor cracks/openings on site map. ☒
- \* Note the length of the crack/opening. ☒
- \* Note the width of the crack/opening. None
- \* Comments:

**C. COVER SYSTEM - EXTERIOR INSPECTION**

- 1. Walk and inspect the entire perimeter of the Site.**
- 2. Walk and inspect all of the paved areas (concrete and asphalt) of the Site.**
- 3. Walk and inspect all of the unpaved areas of the Site including artificial turf field.**

- \* Are there any signs of significant cracks, settlement, or deterioration of the paved areas? ☒
- \* Has any of the pavement material been removed? ☒
- \* Are there signs of vehicular use on the unpaved areas (tire tracks, rutting, etc.)? ☒
- \* Have any structures been constructed on the unpaved areas? ☒
- \* Are there any signs of soil washing or erosion (gullies, soil washed out onto the pavement)? ☒
- \* Are there any signs of intrusive activities (drilling, digging, trenching, grading, excavating, etc.)? ☒
- \* Comments:

**D. REPAIRS**

Summarize needed/completed repairs to Engineering Controls:

Inspector's Signature: Anthony Mariano

**Monthly/Severe Condition Inspection Form**

**Mott Haven Campus  
730 Concourse Village West, Bronx, New York 10451**

Inspector's Name: Anthony Mariano

Weather Conditions: Cloudy

Inspection Date: 8/27/11

Air Temperature (°F): 73°F

Inspection Time:

Comments: 8/19/11 Replaced belt 14 Bldg. B - SSDS  
Fan - Pulley problems

**A. SSDS SYSTEM INSPECTION**

**1. Walk the entire roof surface of school buildings.**

- \* Inspect fan stack guide wires. ☒
- \* Inspect fan mounting and vibration isolators. ☒
- \* Inspect condition of fan belt. ☒
- \* Inspect alignment of fan belt. ☒
- \* Record vacuum gauge reading: ☒
- \* Inspect bolts and set screws for tightness and rusty condition. ☒
- \* Inspect for cleanliness. Clean exterior surfaces only. Remove dust and grease on motor housing. ☒
- \* Are the indicator lights on the Building Management System functioning properly? ☒
- \* Confirm that spare fan is stored in designated secure location and in working condition. ☒
- \* Confirm that the spare fan's bearings are completely filled with grease/lubricant. ☒
- \* Rotate the fan wheel of the spare fan several times to ensure that bearings remain lubricated. ☒
- \* Comments (see or hear anything unusual?): NO

**B. COVER SYSTEM - BOTTOM FLOOR INSPECTION**

**1. Walk all of the bottom floors**

- \* Any visible cracks or depressions in the ground floors? ☒
- \* Any other visible openings (unintended) in the ground floors? ☒
- \* Draw approximate location of floor cracks/openings on site map. ☒
- \* Note the length of the crack/opening. ☒
- \* Note the width of the crack/opening. None
- \* Comments:

**C. COVER SYSTEM - EXTERIOR INSPECTION**

1. Walk and inspect the entire perimeter of the Site.
2. Walk and inspect all of the paved areas (concrete and asphalt) of the Site.
3. Walk and inspect all of the unpaved areas of the Site including artificial turf field.

- \* Are there any signs of significant cracks, settlement, or deterioration of the paved areas? ☒
- \* Has any of the pavement material been removed? ☒
- \* Are there signs of vehicular use on the unpaved areas (tire tracks, rutting, etc.)? ☒
- \* Have any structures been constructed on the unpaved areas? ☒
- \* Are there any signs of soil washing or erosion (gullies, soil washed out onto the pavement)? ☒
- \* Are there any signs of intrusive activities (drilling, digging, trenching, grading, excavating, etc.)? ☒
- \* Comments:

**D. REPAIRS**

Summarize needed/completed repairs to Engineering Controls:

Inspector's Signature: Anthony Mariano

**Attachment 3**  
**Biweekly Inspection Logs**



# FIELD ACTIVITY DAILY LOG

Shaw Environmental, Inc.

**Project Name:** NYCSCA Mott Haven

**Date:** 8/23/10

**Field Activity Subject:** SSDS Start-up Inspection

**Description of Daily Activities and Events:**

- 7:30 AM Shaw on site.
- I arrived on site and began inspecting the monitoring ports in Building D. The monitoring ports had the ball valves installed as requested. I checked the negative pressure and again the values were in excess of the -0.010 inches required.
- I continued to check the monitoring ports in Buildings C, B, F, A, and E. Now that construction is less intensive, I was able to find some of the monitoring ports I was unable to reach the previous visit. All monitoring ports tested today were significantly greater than the -0.010 inches typically ranging from -0.304 to -3.204 inches.
- Based on the two visits I performed on site, 25 out of the 29 monitoring ports were tested with acceptable negative pressures. There were only 4 monitoring ports that were inaccessible due to construction materials on both visits. These four locations were spread across three buildings at the site.
- I called Kevin from WDF (the SSDS contractor) to speak with him about the monitoring ports. He assured me the ball valves had been installed on the four monitoring ports I was unable to reach due to construction materials.
- Based on the information collected on both site inspections including the very high negative pressures, the SSDS system is operating as designed and no additional pressure testing is necessary.
- 12:00 PM Shaw off site.

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

**Mott Haven - SSDS Pressure Field Extension (PFE) Performance Testing Results**

<u>PFE #</u>	<u>Vacuum (Inches of Water)</u>		<u>Acceptable Pressure</u>
	<u>7/29/2010</u>	<u>8/23/2010</u>	
A1	-1.471	-0.346	Yes
A2	-1.347	-0.304	Yes
A3	-	-	*
A4	-	-	*
A5	-1.472	-	Yes
B1	-	-0.422	Yes
B2	-	-	*
B3	-1.611	-	Yes
B4	-	-0.383	Yes
B5	-	-0.393	Yes
C1	-4.028	-3.204	Yes
C2	-0.820	-3.193	Yes
C3	-	-3.193	Yes
C4	-	-3.193	Yes
D1	-4.044	-	Yes
D2	-3.981	-3.161	Yes
D3	-3.995	-3.170	Yes
D4	-4.009	-3.185	Yes
D5	-4.020	-	Yes
E1	-	-	*
E2	-1.677	-0.560	Yes
E3	-	-0.557	Yes
E4	-1.587	-0.450	Yes
E5	-	-0.416	Yes
F1	-	-0.381	Yes
F2	-1.530	-0.384	Yes
F3	-	-0.354	Yes
F4	-1.532	-0.385	Yes
F5	-1.533	-0.383	Yes

\* Two SSDS performance testing events were conducted due to PFE access limitations during ongoing construction activities. Between the two events, 25 of 29 PFE monitoring points were tested and found to be at least 30 times greater than the New York State Department of Health performance criteria of 0.01 inches of water. The four remaining PFE points were inaccessible during both events, but based on the more than adequate vacuum and considering that the four points are not all in one place, Shaw has documented that the SSDS is working as designed across the entire footprint of the campus buildings.



# FIELD ACTIVITY DAILY LOG

Shaw Environmental, Inc.

**Project Name:** NYCSCA Mott Haven

**Date:** 9/14/10

**Field Activity Subject:** SSDS Weekly Inspection

**Description of Daily Activities and Events:**

- 7:45 AM Shaw on site.
- I met with the head custodian Anthony Mariano and explained I was performing a weekly SSDS inspection. I explained I would come to the school every week to inspect all six (6) fans until the BMS was monitoring the fans.
- Anthony had one of his custodians, A.J., take me up to each of the four roof top areas to inspect the fans.
- All six (6) SSDS fans that we inspected were operating with no problems.
- I exchanged contact information with A.J. and explained I would be back again next Tuesday for another inspection.
- 9:15 AM Shaw off site.

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



# FIELD ACTIVITY DAILY LOG

Shaw Environmental, Inc.

**Project Name:** NYCSCA Mott Haven

**Date:** 9/21/10

**Field Activity Subject:** SSDS Weekly Inspection

**Description of Daily Activities and Events:**

- 10:30 AM Shaw on site.
- I met with the head custodian Anthony Mariano in the rear of the building and went to his office to sign the log book. I explained I was performing one of the weekly SSDS inspections.
- Anthony had one of his custodians, A.J., take me up to each of the four roof top areas to inspect the (6) fans.
- All six (6) SSDS fans that we inspected today were operating with no problems.
- I reminded A.J. I would be back again next Tuesday for another inspection.
- 11:15 AM Shaw off site.

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





# FIELD ACTIVITY DAILY LOG

Shaw Environmental, Inc.

**Project Name:** NYCSCA Mott Haven

**Date:** 9/28/10

**Field Activity Subject:** SSDS Weekly Inspection

**Description of Daily Activities and Events:**

- 7:00 AM Shaw on site.
- I met with the head custodian Anthony Mariano and went to his office to sign the log book. I explained I was performing one of the weekly SSDS inspections.
- I called A.J. who took me up to each of the four roof top areas to inspect the (6) fans.
- All six (6) SSDS fans that we inspected today were operating with no problems.
- I reminded A.J. I would be back again next Tuesday for another inspection.
- 8:00 AM Shaw off site.

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



# FIELD ACTIVITY DAILY LOG

Shaw Environmental, Inc.

**Project Name:** NYCSCA Mott Haven

**Date:** 10/5/10

**Field Activity Subject:** SSDS Weekly Inspection

**Description of Daily Activities and Events:**

- 7:00 AM Shaw on site.
- I went to the custodian office to sign the log book and find A.J. for the weekly SSDS inspections.
- A.J. and I went up to each of the four roof top areas to inspect the (6) fans.
- All six (6) SSDS fans that we inspected today were operating with no problems.
- While inspecting the fans on Building A, we ran into an electrical contractor working on an AC unit. We asked him if he knew when the BMS instrumentation would be installed on the SSDS fans. He called ITC and found out it was still a few weeks away.
- I reminded A.J. I would be back again next Tuesday for another inspection.
- 7:45 AM Shaw off site.

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



# FIELD ACTIVITY DAILY LOG

Shaw Environmental, Inc.

**Project Name:** NYCSCA Mott Haven

**Date:** 10/12/10

**Field Activity Subject:** SSDS Weekly Inspection

**Description of Daily Activities and Events:**

- 7:45 AM Shaw on site.
- When I arrived on site, I went down to the custodian's office to sign in. The custodian was not in at this time nor was his assistant A.J. that I normally do the inspection with.
- I called A.J. on his cell and he let me know where the elevator key was so I could perform my inspection.
- I went up to each of the four roof top areas to inspect the (6) fans.
- All six (6) SSDS fans that I inspected today were operating with no problems.
- I reminded A.J. I would be back again next Tuesday for another inspection and told him where to find the keys I left with security for the elevators.
- 8:45 AM Shaw off site.

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



# FIELD ACTIVITY DAILY LOG

Shaw Environmental, Inc.

**Project Name:** NYCSCA Mott Haven

**Date:** 10/19/10

**Field Activity Subject:** SSDS Weekly Inspection

**Description of Daily Activities and Events:**

- 7:30 AM Shaw on site.
- When I arrived on site, I went down to the custodian's office to sign in. A received an elevator key to perform my inspection and went out to inspect the fans on my own.
- I went up to each of the four roof top areas to inspect the (6) fans.
- All six (6) SSDS fans that I inspected today were operating with no problems.
- I returned to the custodian office to drop off the elevator key and reminded Anthony I would be back again next Tuesday for another inspection.
- 8:30 AM Shaw off site.

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



# FIELD ACTIVITY DAILY LOG

Shaw Environmental, Inc.

**Project Name:** NYCSCA Mott Haven

**Date:** 10/26/10

**Field Activity Subject:** SSDS Weekly Inspection

**Description of Daily Activities and Events:**

- 7:30 AM Shaw on site.
- When I arrived on site, I went down to the custodian's office to sign in. A received an elevator key to perform my inspection and went out to inspect the fans on my own.
- I went up to each of the four roof top areas to inspect the (6) fans.
- All six (6) SSDS fans that I inspected today were operating with no problems.
- I returned to the custodian office to drop off the elevator key and reminded Anthony I would be back again next Tuesday for another inspection.
- 8:30 AM Shaw off site.

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



Shaw Environmental, Inc.

## FIELD ACTIVITY DAILY LOG

**Project Name:** NYCSCA Mott Haven**Date:** 11/2/10**Field Activity Subject:** SSDS Weekly Inspection**Description of Daily Activities and Events:**

- 7:00 AM Shaw on site.
- When I arrived on site, I went down to the custodian's office to sign in. I received an elevator key to perform my inspection and went out to inspect the fans on my own.
- I went up to each of the four roof top areas to inspect the (6) fans.
- All six (6) SSDS fans that I inspected today were operating with no problems.
- Curtis Kraemer called and asked me to walk the Cellar Floor of the building to see if I could smell any odors. I walked the entire Cellar floor plan and did not smell anything.
- When I returned to the custodian office to drop off the elevator key I asked A.J. from the custodial staff if he had smelled anything today, or heard any complaints from teachers at the school. A.J. said he did not smell any odors today and had not heard complaints from anyone either.
- I reminded A.J. I would be back again next Tuesday for another inspection.
- 8:00 AM Shaw off site.

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



# FIELD ACTIVITY DAILY LOG

Shaw Environmental, Inc.

**Project Name:** NYCSCA Mott Haven

**Date:** 11/16/10

**Field Activity Subject:** SSDS Bi-weekly Inspection

**Description of Daily Activities and Events:**

- 8:00 AM Shaw on site.
- When I arrived on site, I went down to the custodian's office to sign in. I received an elevator key to perform my inspection and went out to inspect the fans on my own.
- I went up to each of the four roof top areas to inspect the (6) fans.
- All six (6) SSDS fans that I inspected today were operating with no problems.
- I inspected the flow switches at all (6) fans. The flow switches were W.E. Anderson (Model #: V4-2-U) and matched the specs. They appeared to be installed with the proper pipe length requirements. None of the flow switches were connected to the BMS. The BMS for the project is not operational yet either.
- When I returned to the custodian office, I informed them that the inspections would be at a bi-weekly frequency moving forward.
- I reminded them I would be back again next on Nov 30<sup>th</sup> for another inspection.
- 9:00 AM Shaw off site.

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



# FIELD ACTIVITY DAILY LOG

Shaw Environmental, Inc.

**Project Name:** NYCSCA Mott Haven

**Date:** 11/30/10

**Field Activity Subject:** SSDS Bi-weekly Inspection

**Description of Daily Activities and Events:**

- 12:30 PM Shaw on site.
- When I arrived on site, I went down to the custodian's office to sign in. I received an elevator key to perform my inspection and went out to inspect the fans on my own.
- I went up to each of the four roof top areas to inspect the (6) fans.
- All six (6) SSDS fans that I inspected today were operating with no problems.
- During the inspection, there was a minor incident with a student. When exiting the gated stairwell to the roof in Building B, a student tried to physically push his way past me and gain access to the roof. I grabbed the student, pulled him back from the gated entrance, and closed the door. He asked what the problem was and I stated nothing but that he could not go on the roof. I informed the head custodian Anthony of this incident at the end of my inspection and he informed me he would contact the principal for that school of the incident.
- I also mentioned to Anthony that the gated entrances can be accessed without a key by sticking your finger through the fence and opening the door from the inside. I stated that if students were looking to get on the roof, it would not be long before they figured this trick out and maybe the custodians should consider changing the locking devices.
- I reminded them I would be back again next on Dec 14<sup>th</sup> for another inspection.
- 1:30 PM Shaw off site.

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





# FIELD ACTIVITY DAILY LOG

Shaw Environmental, Inc.

**Project Name:** NYCSCA Mott Haven

**Date:** 12/14/10

**Field Activity Subject:** SSDS Bi-weekly Inspection

**Description of Daily Activities and Events:**

- 8:00 AM Shaw on site.
- When I arrived on site, I went down to the custodian's office to sign in. I received an elevator key to perform my inspection and went out to inspect the fans on my own.
- I went up to each of the four roof top areas to inspect the (6) fans.
- All six (6) SSDS fans that I inspected today were operating. However, each fan had ice formed on the drain of the stack. When I removed the ice, no water leaked out of the stack. It also appeared that there was leakage of water from the fan unit itself.
- I spoke with the custodial staff including head custodian Anthony after the inspection to make him aware of the issue. The custodial staff will need to develop a maintenance schedule to remove the ice from forming at the base of the stacks, or create a fix that can prevent the water from freezing in the bottom of the stack.
- Anthony said he would speak with SCA regarding potential adjustments to the vent stacks to alleviate this issue.
- On my previous inspection, a student in the New Explorers High School tried to access the roof through the stairwell gate, physically. On this site inspection, a female student asked where I was going up the stairwell and wanted to know what was up there. There is a strong curiosity about the roof with the students in this school and they are often hanging out in the stairwell. Also, the existing lock can be opened by simply putting your finger through the gate and opening from the inside handle. The school should increase the security on this stairwell.
- Anthony said he would run any proposal to relieve the freezing water issue by our office before implementing.
- I reminded them I would be back again next on Dec 28<sup>th</sup> for another inspection.
- 9:00 PM Shaw off site.

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



# FIELD ACTIVITY DAILY LOG

Shaw Environmental, Inc.

**Project Name:** NYCSCA Mott Haven

**Date:** 12/23/10

**Field Activity Subject:** SSDS Bi-weekly Inspection

**Description of Daily Activities and Events:**

- 7:00 AM Shaw on site.
- When I arrived on site, I went down to the custodian's office to sign in. I received an elevator key to perform my inspection and went out to inspect the fans on my own. I was also given keys to access the roof top areas. Since my last inspection, the custodians have installed metal plates that prevent these doors from being opened without a key.
- I went up to each of the four roof top areas to inspect the (6) fans.
- All six (6) SSDS fans that I inspected today were operating.
- Each fan stack had a minor amount of ice formed at the bottom of the stack. I took a rock and broke the ice, allowing the trapped water to exit the stack. The custodian has been breaking up the ice at least twice a week to prevent excess formations.
- Anthony said he would speak with SCA regarding potential adjustments to the vent stacks to alleviate this issue beyond breaking the ice every few days.
- Anthony said he would run any proposal to relieve the freezing water issue by our office before implementing.
- I reminded them I would be back again next on Jan 4<sup>th</sup> for another inspection.
- 8:00 AM Shaw off site.

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



# FIELD ACTIVITY DAILY LOG

**Project Name:** NYCSCA Mott Haven

**Date:** 1/5/11

**Field Activity Subject:** SSDS Bi-weekly Inspection

**Description of Daily Activities and Events:**

- 7:30 AM Shaw on site.
- When I arrived on site, I went down to the custodian's office to sign in. Anthony informed me that keys to access two of the roofs (Building A & B) had been given to a contractor and not returned. Therefore, I was unable to access the four fans on these roofs today.
- I went up to each of the other two roof top areas to inspect the (2) fans there.
- All two (2) SSDS fans that I inspected today were operating.
- The custodian informed me that they had been removing the ice that forms at the bottom of the stack each day when they check other roof top equipment. They also said they have not witnessed any times when the fans are not operating properly.
- I reminded them I would be back again next on Jan 18<sup>th</sup> for another inspection.
- 8:00 AM Shaw off site.

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



# FIELD ACTIVITY DAILY LOG

**Project Name:** NYCSCA Mott Haven

**Date:** 1/19/11

**Field Activity Subject:** SSDS Bi-weekly Inspection

**Description of Daily Activities and Events:**

- 6:45 AM Shaw on site.
- When I arrived on site, I went down to the custodian's office to sign in. Anthony gave me the keys to access each roof for the inspection.
- All of the fans were operating properly with the exception of the (2) fans on Building B (EF-2 and EF-6). With four (4) of the six (6) fans functioning properly, and with redundancy in the SSDS design, the system is operating effectively with respect to sub-slab vacuum.
- After my inspection, I went back to Anthony's office to notify him that the two fans were not running. He came with me to take a look at the 3<sup>rd</sup> Floor electrical closet. The control box for EF-6 was turned off. We turned it into the "Hand" position but the "On" light did not come on. The control box for EF-2 was in the "Hand" position already, but the "On" indicator light was off. We tried a few times to toggle the switches on and off to get the control boxes working but had no success.
- We realized there must be an electrical problem and called the SCA PO, Ray Carrion, and an electrician. Anthony did not believe the electrician would get to the site until the afternoon, so I left the site planning to return later.
- 8:15 AM Shaw off site, returned at 1:00 PM
- The custodian told me the electrician was on the way. Around 1:45 the electrician arrived at the site and we explained the issue to him. We went back to the 3<sup>rd</sup> floor electrical closet and inspected the control boxes for each fan. First, he inspected the box for EF-6. When put in the "Hand" position, the power traveled through the box and out to the fan. Although the indicator light still did not come on, the box was operating properly. We went to the roof and confirmed the EF-6 fan was operating normally.
- We returned to the 3<sup>rd</sup> floor closet and continued looking at the box for EF-2. We realized that one of the heaters (an internal circuit breaker) was not functioning properly. We started to trace the wires from the control box in the direction of the roof top fan, EF-2. When we reached the electrical room in the bulkhead on the roof, we realized that the previous day a controls contractor had installed a device on the wires coming up from EF-2's control box. That contractor had spliced into the wires improperly. This splice interrupted one of the three phases of electrical power to the fan motor. We had the new wiring removed and reconnected the wires as they were previous to the contractor's work. At that point, EF-2 began operating properly again and the issue was repaired.
- We informed the custodian of the mistake caused by the controls contractor. The controls contractor will have to return to the site to reinstall his wiring properly.
- I reminded them I would be back again next on Feb 1<sup>st</sup> for another inspection.
- 4:30 PM Shaw off site.

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



# FIELD ACTIVITY DAILY LOG

Shaw Environmental, Inc.

**Project Name:** NYCSCA Mott Haven

**Date:** 2/1/11

**Field Activity Subject:** SSDS Bi-weekly Inspection

**Description of Daily Activities and Events:**

- 8:15 AM Shaw on site.
- When I arrived on site, I went down to the custodian's office to sign in. Anthony gave me the keys to access each roof for the inspection.
- All of the fans were operating properly including the two fans on top of building B that had a problem last inspection.
- After my inspection, I informed Anthony that the fans were running properly. I also notified him that ice was starting to accumulate in the drip hole at the bottom of each fan stack. I told him he should have that checked more frequently now with the cold, wet weather.
- I reminded him that my next inspection would be on Feb 15<sup>th</sup>.
- 9:15 AM Shaw off site.

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



# FIELD ACTIVITY DAILY LOG

Shaw Environmental, Inc.

**Project Name:** NYCSCA Mott Haven

**Date:** 2/15/11

**Field Activity Subject:** SSDS Bi-weekly Inspection

**Description of Daily Activities and Events:**

- 8:00 AM Shaw on site.
- When I arrived on site, I went down to the custodian's office to sign in. Anthony gave me the keys to access each roof for the inspection.
- All of the fans were operating properly. There was some ice build up at the bottom of the vent stacks but I will be able to break it easily with a stone, releasing trapped water.
- After my inspection, I informed Anthony that the fans were running properly. I also notified him that there would be IAQ sampling this weekend and reminded him not to perform any work that could interfere with the test. He signed the custodial permit for this work before I left the site.
- I reminded him that my next inspection would be on Mar 1<sup>st</sup>.
- 9:00 AM Shaw off site.

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



# FIELD ACTIVITY DAILY LOG

Shaw Environmental, Inc.

**Project Name:** NYCSCA Mott Haven

**Date:** 3/1/11

**Field Activity Subject:** SSDS Bi-Weekly Inspection

**Description of Daily Activities and Events:**

- 8:00 AM Shaw on site.
- When I arrived on site, I went down to the custodian's office to sign in. I received an elevator key to perform my inspection and went out to inspect the fans on my own.
- I went up to each of the four roof top areas to inspect the (6) fans.
- All six (6) SSDS fans that I inspected today were operating with no problems.
- I also bought (2) custodian permits for Anthony to sign for upcoming weekend work.
- After my inspection, I returned to the custodian office to drop off the elevator key and let Anthony know the fans were operating properly.
- I reminded Anthony I would be back again on Mar 15<sup>th</sup> for another inspection.
- 9:00 AM Shaw off site.

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



# FIELD ACTIVITY DAILY LOG

Shaw Environmental, Inc.

**Project Name:** NYCSCA Mott Haven

**Date:** 3/29/11

**Field Activity Subject:** SSDS Bi-Weekly Inspection

**Description of Daily Activities and Events:**

- 8:00 AM Shaw on site.
- When I arrived on site, I went down to the custodian's office to sign in. I received an elevator key to perform my inspection and went out to inspect the fans on my own.
- I went up to each of the four roof top areas to inspect the (6) fans.
- All six (6) SSDS fans that I inspected today were operating with no problems.
- After my inspection, I returned to the custodian office to drop off the elevator key and let Anthony know the fans were operating properly.
- I reminded Anthony I would be back again on April 12<sup>th</sup> for another inspection.
- 9:00 AM Shaw off site.

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





# FIELD ACTIVITY DAILY LOG

Shaw Environmental, Inc.

**Project Name:** NYCSCA Mott Haven

**Date:** 4/12/11

**Field Activity Subject:** SSDS Bi-Weekly Inspection

**Description of Daily Activities and Events:**

- 11:00 AM Shaw on site.
- When I arrived on site, I went down to the custodian's office to sign in. I received an elevator key to perform my inspection and went out to inspect the fans on my own.
- I went up to each of the four roof top areas to inspect the (6) fans.
- All six (6) SSDS fans that I inspected today were operating with no problems.
- After my inspection, I returned to the custodian office to drop off the elevator key and let Anthony know the fans were operating properly.
- I reminded Anthony I would be back again on April 26<sup>th</sup> for another inspection.
- 12:00 PM Shaw off site.

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



# FIELD ACTIVITY DAILY LOG

Shaw Environmental, Inc.

**Project Name:** NYCSCA Mott Haven

**Date:** 4/26/11

**Field Activity Subject:** SSDS Bi-Weekly Inspection

**Description of Daily Activities and Events:**

- 9:45 AM Shaw on site.
- When I arrived on site, I went down to the custodian's office to sign in. Anthony wasn't there today since the schools were closed. I performed the inspection of the fans on my own.
- I went up to each of the four roof top areas to inspect the (6) fans.
- All six (6) SSDS fans that I inspected today were operating with no problems.
- After my inspection, I returned to the custodian office to drop off the keys.
- The next inspection will be on May 10<sup>th</sup>.
- 10:45 AM Shaw off site.

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



# FIELD ACTIVITY DAILY LOG

Shaw Environmental, Inc.

**Project Name:** NYCSCA Mott Haven

**Date:** 5/10/11

**Field Activity Subject:** SSDS Bi-Weekly Inspection

**Description of Daily Activities and Events:**

- 9:00 AM Shaw on site.
- When I arrived on site, I went down to the custodian's office to sign in. Anthony gave me the roof keys and I performed the inspection of the fans on my own.
- I went up to each of the four roof top areas to inspect the (6) fans.
- Five (5) of the six (6) SSDS fans that I inspected today were operating with no problems. With five (5) fans functioning properly, and with redundancy in the SSDS design, the system is operating effectively with respect to sub-slab vacuum.
- The fan on the bulkhead roof of Building A seemed to be operating but at a lower capacity.
- When I finished the inspection, I informed Anthony he should check this fan for maintenance. Later in the day, I received a phone from Anthony's assistant A.J. that the belt was in poor condition. He replaced the belt on that fan and the issue was repaired. He then said he would change the belts on the remaining five (5) SSDS fans over the course of this week as a precaution.
- I reminded Anthony my next inspection will be on May 24<sup>th</sup>.
- 10:00 AM Shaw off site.

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



# FIELD ACTIVITY DAILY LOG

Shaw Environmental, Inc.

**Project Name:** NYCSCA Mott Haven

**Date:** 5/24/11

**Field Activity Subject:** SSDS Bi-Weekly Inspection

**Description of Daily Activities and Events:**

- 7:30 AM Shaw on site.
- When I arrived on site, I went down to the custodian's office to sign in. Anthony gave me the roof keys and I performed the inspection of the fans on my own.
- I went up to each of the four roof top areas to inspect the (6) fans.
- Four (4) of the six (6) SSDS fans that I inspected today were not operating. At each of these fan locations, I turned the fan switches OFF and back ON again in an effort to restart the fans. This did not work at any of the four (4) fan locations. The non-operating fans were: EF-1, EF-2, EF-4, and EF-6. With two (2) of the six (6) fans still functioning properly (on Buildings A and C), and with redundancy in the SSDS design, the system is operating effectively with respect to sub-slab vacuum.
- When I finished the inspection, I informed Anthony that four (4) of the fans were not operating and appeared to have no power or response to the switch. I asked Anthony to investigate why this was the case and to call me later in the afternoon with an update on status. I spoke with Anthony again on Thursday and he stated that the fans were still not running, to his knowledge. I informed SCA IEH and the SCA PO of the situation. I also scheduled to inspect the fans on Friday.
- 8:30 AM Shaw off site.

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



# FIELD ACTIVITY DAILY LOG

Shaw Environmental, Inc.

**Project Name:** NYCSCA Mott Haven

**Date:** 5/27/11

**Field Activity Subject:** SSDS Inspection Follow-up

**Description of Daily Activities and Events:**

- 8:30 AM Shaw on site.
- When I arrived on site, I went down to the custodian's office to sign in. Anthony decided to inspect the fans with me today.
- We first went to the electrical closet on the 3<sup>rd</sup> floor of the Building "D". The circuit breaker for the SSDS fan on this roof was in the "AUTO" position and the light indicating power was not lit. Anthony turned the switch to the "HAND" position and the light indicating power turned on. We then went on the roof and confirmed the fan was operating properly.
- Next, we went to the 3<sup>rd</sup> floor electrical closet of Building "B" where both SSDS fans were not operating on Tuesday. Again, both switches for the SSDS circuit breakers had been turned to the "AUTO" position and the light indicating power was not lit. Anthony turned the switches to the "HAND" position and the light indicating power turned on. We then went on the roof and confirmed both fans were operating properly.
- Next, we went to the 3<sup>rd</sup> floor electrical closet of Building "A" where one fan was not operating on Tuesday. Again, both switches for the SSDS circuit breakers had been turned to the "AUTO" position and the light indicating power was not lit. Anthony turned the switches to the "HAND" position and the light indicating power turned on. We then went on the roof and confirmed both fans were operating properly.
- The conclusion was that all of the fans were operating properly so long as the power to the fans is not interrupted.
- I met with Jim from SCA commissioning on site and we discussed improvements that could be made to prevent future occurrences like this from happening. One suggestion, which was implemented today, was to write on the circuit breaker box of all SSDS fans "DO NOT TURN OFF FROM HAND POSITION." Jim did this in each electrical closet. Jim also suggested removing the switch at the actual fan locations after placing them in a permanent ON position.
- After Anthony and I finished the inspection, I met with the SCA PO, Ray, to explain the resolved situation. I explained that Jim would be suggesting some improvements to him to prevent this from occurring again.
- 10:30 AM Shaw off site.

<b>Visitors on Site:</b>	<b>Changes from Plans and Specifications and Other Special Orders and Important Decisions:</b>
<b>Weather Conditions:</b> 83°F, Sunny	
<b>Shaw Personnel On Site:</b> Peter Helseth, P.E.	<b>Important Telephone Calls:</b>

# FIELD ACTIVITY DAILY LOG

**Project Name:** NYCSCA Mott Haven

**Date:** 6/21/11

**Field Activity Subject:** SSDS Bi-Weekly Inspection

**Description of Daily Activities and Events:**

- 8:45 a.m. DG on site.
- Checked in with custodian's office after arriving on site to sign in. Carlos, the custodian's assistant, escorted me to each roof top to perform the inspection of the six (6) SSDS fans.
- All of the fans were operating properly with the exception of the (2) fans on Building A (EF-1 and EF-5). These fans were running too quietly and did not appear to be functioning normally (as though only the electric motors were running). The remaining four (4) fans were operating normally, and with redundancy in the SSDS design, the system is operating effectively with respect to sub-slab vacuum.
- Prior to leaving the campus I informed the head custodian, Anthony, that the two (2) fans on Building A were not operating properly, and I asked him to investigate the fan belts on these units and to replace the belts if necessary. I also mentioned that the SSDS vacuum gauges did not appear to be reading properly.
- In a follow-up phone call on 6/24/11, Anthony confirmed that he investigated the two (2) SSDS fans on Building A and replaced the fan belt in each unit on 6/21/11, repairing the issue. He explained that the fan motor and blower on these units were misaligned, causing the belts to become frayed.
- I informed Anthony that I would be back in two weeks for another inspection.
- 10:15 a.m. DG off site.

<b>Visitors on Site:</b>	<b>Changes from Plans and Specifications and Other Special Orders and Important Decisions:</b>
<b>Weather Conditions:</b> 70°F, Clear	
<b>Shaw Personnel On Site:</b> David Greffenius	<b>Important Telephone Calls:</b>

# FIELD ACTIVITY DAILY LOG

**Project Name:** NYCSCA Mott Haven

**Date:** 7/8/11

**Field Activity Subject:** SSDS Bi-Weekly Inspection

**Description of Daily Activities and Events:**

- 8:00 a.m. DG on site.
- Checked in with custodian's office to sign in. Anthony, the head custodian, gave me the roof keys and I performed the inspection of the six (6) SSDS fans on my own.
- Five (5) of the six (6) SSDS fans inspected today were operating with no problems. One (1) of the SSDS fans, EF-3 on top of Building C, did not appear to be functioning normally. With five (5) fans functioning properly, and with redundancy in the SSDS design, the system is operating effectively with respect to sub-slab vacuum.
- Prior to leaving I informed Anthony that the fan on Building C was not operating correctly (even though the electric motor was turning) and I asked him to investigate.
- In follow-up phone calls/e-mail on 7/11/11 and 7/12/11, Anthony confirmed that he investigated the one (1) SSDS fan on Building C and replaced the fan belt on 7/12/11, correcting the issue.
- I reminded Anthony that I would be back in two weeks for another inspection.
- 9:30 a.m. DG off site.

<b>Visitors on Site:</b>	<b>Changes from Plans and Specifications and Other Special Orders and Important Decisions:</b>
<b>Weather Conditions:</b> 76°F, Cloudy	
<b>Shaw Personnel On Site:</b> David Greffenius	<b>Important Telephone Calls:</b>

# FIELD ACTIVITY DAILY LOG

**Project Name:** NYCSCA Mott Haven**Date:** 7/21/11**Field Activity Subject:** SSDS Bi-Weekly Inspection**Description of Daily Activities and Events:**

- 8:15 a.m. DG on site.
- Checked in with custodian's office to sign in. The head custodian, Anthony, gave me the roof keys and I performed the inspection of the six (6) SSDS fans on my own. Anthony informed me that the fan belt in one of the SSDS fans on Building B (fan EF-6, on the lower roof) had been replaced yesterday (7/20/11) due to a cracked belt.
- All six (6) SSDS fans inspected today were operating normally with no problems.
- I confirmed with Anthony that the Mott Haven facility has a BMS computer on site (although the computer has not been fully integrated as a building monitoring tool).
- I reminded Anthony that I would be back for another inspection in two weeks.
- 10:00 a.m. DG off site.

<b>Visitors on Site:</b>	<b>Changes from Plans and Specifications and Other Special Orders and Important Decisions:</b>
<b>Weather Conditions:</b> 77°F, Hazy, humid	
<b>Shaw Personnel On Site:</b> David Greffenius	<b>Important Telephone Calls:</b>



# FIELD ACTIVITY DAILY LOG

**Project Name:** NYCSCA Mott Haven**Date:** 8/5/11**Field Activity Subject:** SSDS Bi-Weekly Inspection**Description of Daily Activities and Events:**

- 5:00 p.m. DG on site.
- Checked in with custodian's office to sign in. I met the evening custodian, A.J., who gave me the roof keys and I performed the inspection of the six (6) SSDS fans on my own.
- All six (6) SSDS fans inspected this afternoon were operating normally with no problems.
- After my inspection, I returned to the custodian office to drop off the roof keys & elevator key and let A.J. know the fans were operating properly.
- I informed A.J. that I would be back in two weeks for another inspection.
- 6:15 p.m. DG off site.

<b>Visitors on Site:</b>	<b>Changes from Plans and Specifications and Other Special Orders and Important Decisions:</b>
<b>Weather Conditions:</b> 81°F, Clear	
<b>Shaw Personnel On Site:</b> David Greffenius	<b>Important Telephone Calls:</b>

**Attachment 4**  
**Groundwater Monitoring Reports**



**Shaw Environmental, Inc.**  
92 North Avenue  
New Rochelle, New York 10801  
914-633-9324  
FAX: 914-235-0717

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October 29, 2010

Mr. Vadim Brevdo, P.E.  
Environmental Engineer  
Section Chief  
New York State Department of Environmental Conservation  
Division of Environmental Remediation, Region 2  
47-40 21<sup>st</sup> Street  
Long Island City, New York 11101

**Re:   Semi-Annual Groundwater Monitoring  
      September 2010 (8<sup>th</sup> Event, 4<sup>TH</sup> Semi-Annual Event)  
      Mott Haven Site  
      730 Concourse Village West  
      Bronx, New York 11375  
      SCA LLW# 033485/SCA Job# 19730  
      BCP No. C203030**

Dear Mr. Brevdo:

On behalf of the New York City School Construction Authority (NYCSCA), Shaw Environmental, Inc. (Shaw) has prepared this semi-annual report regarding the post remediation groundwater sampling at the Mott Haven Site. Groundwater monitoring results are being reported in accordance with the New York State Department of Environmental Conservation (NYSDEC) approved Mott Haven Final Site Management Plan (SMP), prepared by Shaw in November 2008.

On September 25, 2010, water levels were measured in the on-site monitoring wells as well as in five existing upgradient monitoring wells (MW-8, MW-9, MW-18, MW-20, and MW-21) as shown on Figure 1. The depth to water measurements and corresponding groundwater elevations are presented in Table 1. Groundwater contours based on the groundwater elevation data are shown on Figure 2. The contours on Figure 2 indicate that the direction of horizontal groundwater flow is toward the southeast, as was determined during the Remedial Investigation (RI) and previous groundwater monitoring events.

On April 11, 2010, the steel protective casings and polyvinyl chloride (PVC) well risers of monitoring wells MW-23, MW-25, MW-25R, and MW-26R were adjusted to be incorporated into the base of a large architectural fence. The height of the protective casings and PVC risers were adjusted upward, or downward, depending upon the final elevation of the fence base at each well location. Top of PVC well elevations are presented in Table 1.

On May 14, 2010, Shaw informed the NYSDEC of the need to decommission the three downgradient monitoring wells (MW-3A, MW-5A and MW-11A) due to ongoing construction along the eastern portion of the Site. The NYSDEC was also informed that the three monitoring wells would be replaced following the completion of the construction work. NYSDEC concurred with the decommissioning and replacement schedule for the three monitoring wells.

On June 11, 2010, monitoring wells MW-3A, MW-5A and MW-11A were decommissioned in accordance with the NYSDEC *Groundwater Monitoring Well Decommissioning Policy*. Since each well

was a single casing installation, with an uncompromised bentonite seal that did not penetrate a confining layer, well decommissioning proceeded as follows:

1. The well was tremie grouted with a mixture of Type I Portland cement, bentonite powder, and water up to five feet below grade;
2. The protective casing, concrete apron, and bollards were removed;
3. The polyvinyl chloride (PVC) riser was cut at five feet below grade; and
4. The remaining borehole was backfilled with soil similar to the in-situ soils up to the ground surface.

On August 27, 2010, replacement monitoring wells, MW-3R and MW-5R, were installed by Aquifer Drilling & Testing (ADT) utilizing a track-mounted GeoProbe<sup>®</sup> drill rig. The boreholes for both wells were advanced using 3-inch casing driven to a depth of 15 feet (ft) below ground surface (bgs). Following advancement to 15 ft bgs, PVC monitoring wells were installed. Both monitoring wells were constructed using 1.5-inch diameter Schedule 40 PVC riser and a 10 foot length of pre-packed (fine-grain Morie #0 sand) 0.01 inch factory-slotted screen. The wells were installed such that the screen interval extended to a depth of at least seven to eight feet into the zone of saturation. The monitoring wells were finished with fine-grain sand backfill (Morie #0), bentonite seal, and concrete. Both monitoring wells were completed with 5-inch flush-mounted protective covers set in one foot by one foot concrete pads.

On September 18, 2010, replacement monitoring well MW-11R was installed by ADT with a track-mounted GeoProbe<sup>®</sup> drill rig. The drilling and well construction methods were identical to those of MW-3R and MW-5R.

All of the on-site monitoring wells were resurveyed on October 2, 2010, by YEC, Inc. of Valley Cottage, New York. Detailed well construction logs for the three replacement wells are in Appendix A., and the monitoring well locations are shown on Figure 1.

On September 25, 2010, groundwater samples were collected from the seven existing on-site groundwater monitoring wells. Sampling was performed in accordance with the Sampling Event Protocol presented in Section 3.3.4 of the SMP. Field Sampling Logs for the groundwater sampling are presented in Appendix B.

The groundwater samples were submitted to Chemtech Environmental Laboratory of Mountainside, New Jersey, a New York State Environmental Laboratory Acceptance Program (ELAP) certified laboratory for analysis of Target Compound List (TCL) volatile organic compounds (VOCs) plus methyl tert-butyl ether (MTBE) per U.S. Environmental Protection Agency (USEPA) Method 8260.

Table 2 summarizes the groundwater analytical data. The laboratory analytical data report for the groundwater sample analysis is provided in Appendix C. Appendix D contains the laboratory certification forms.

Analytical data quality is good. No VOCs were detected in the trip blank indicating that the samples were not exposed to any environment that might impact the sample integrity. The field duplicate sample was collected from MW-23 and both samples contained cis 1,2-dichloroethene (8.0 micrograms per liter [ $\mu\text{g/L}$ ] in MW-23 and 7.8  $\mu\text{g/L}$  in the duplicate) and vinyl chloride (16  $\mu\text{g/L}$  in MW-23 and 15  $\mu\text{g/L}$  in the duplicate). The corresponding concentrations are very similar, and were the only VOCs detected in both samples. The field duplicate results indicate

Mr. Vadim Brevdo  
October 29, 2010  
Page 3

good precision in the laboratory analyses. Generally all other laboratory QC criteria (e.g. surrogate and spike recoveries) were acceptable.

No VOCs were detected in the groundwater samples from two of the three downgradient monitoring wells (MW-5R and MW-11R). Three VOCs were detected in the groundwater sample collected from MW-3R: cis-1,2-dichloroethene was detected at 2.3 µg/L; tetrachloroethene (PCE) was detected at an estimated concentration of 0.53 µg/L; and, vinyl chloride was detected at an estimated concentration of 0.94 µg/L. None of the detected VOCs exceeded the corresponding New York State Class GA standards.

No VOCs were detected in monitoring wells MW-24, MW-25 and MW-26R. PCE had been detected in the sample collected from MW-24 during the previous sampling event at a concentration of 43 µg/L. Three VOCs had been detected in the sample collected from MW-25 during the previous sampling event, including benzene at 2.8 µg/L. Two VOCs had been detected in the sample collected from MW-26R during the previous sampling event, including cis-1,2-dichloroethene at 5.6 µg/L.

Two VOCs were detected in the groundwater sample collected from MW-23. Cis-1,2-dichloroethene was detected at a concentration of 8.0 µg/L which exceeds the Class GA standard of 5.0 µg/L. Vinyl chloride was detected at 16 µg/L which exceeds the Class GA standard of 2.0 µg/L. These two VOCs are not related to the contaminant sources (manufactured gas plant waste and petroleum release) identified during the RI, and are likely from an unidentified upgradient source(s).

The remedial objective for groundwater in the NYSDEC approved Remedial Action Work Plan (RAWP) is to maintain existing groundwater quality at the downgradient property line. Detections of VOCs were limited to one of the three monitoring wells near the downgradient property line (MW-3R) and concentrations were below groundwater quality standards. Accordingly, the remedial objective for groundwater continues to be met per the RAWP.

Please call me at 914 633-9324 if you have any questions or require additional information.

Sincerely,

SHAW ENVIRONMENTAL, INC.



Curtis A. Kraemer, P.G.  
Senior Geologist



Michael R. Sherwood, CPG  
Client Program Manager

cc: C. Bethoney, NYSDOH  
L. Guterman, NYCSCA

Attachments: Appendix A-Replacement Well Logs  
Appendix B-Field Data Sheets  
Appendix C-Laboratory Analytical Data  
Appendix D-Laboratory Certification Forms



**Shaw Environmental, Inc.**  
1633 Broadway, 30<sup>th</sup> Floor  
New York, New York 10019  
212-290-6000  
FAX: 212-290-6001

April 21, 2011

Mr. Vadim Brevdo, P.E.  
Environmental Engineer  
Section Chief  
New York State Department of Environmental Conservation  
Division of Environmental Remediation, Region 2  
47-40 21<sup>st</sup> Street  
Long Island City, New York 11101

**Re:   Semi-Annual Groundwater Monitoring  
      March 2011 (9<sup>th</sup> Event, 5<sup>TH</sup> Semi-Annual Event)  
      Mott Haven Site  
      730 Concourse Village West  
      Bronx, New York 11375  
      SCA LLW# 033485/SCA Job# 28646  
      BCP No. C203030**

Dear Mr. Brevdo:

On behalf of the New York City School Construction Authority (NYCSCA), Shaw Environmental, Inc. (Shaw) has prepared this semi-annual report regarding the post remediation groundwater sampling at the Mott Haven Site. Groundwater monitoring results are being reported in accordance with the November 2008 Mott Haven Final Site Management Plan (SMP), approved by the New York State Department of Environmental Conservation (NYSDEC) on November 25, 2008.

On March 12, 2011, water levels were measured in the on-site monitoring wells and in five existing off-site, upgradient monitoring wells (MW-8, MW-9, MW-18, MW-20, and MW-21) as shown on Figure 1. The depth to water measurements and corresponding groundwater elevations are presented in Table 1. Groundwater contours based on the groundwater elevation data are shown on Figure 2. The contours on Figure 2 indicate that the direction of horizontal groundwater flow is toward the southeast, as was determined during the Remedial Investigation (RI) and previous groundwater monitoring events.

On March 12, 2011, groundwater samples were collected from the seven existing on-site groundwater monitoring wells. Sampling was performed in accordance with the Sampling Event Protocol presented in Section 3.3.4 of the SMP. Field Sampling Logs for the groundwater sampling are presented in Appendix A.

The groundwater samples were submitted to Chemtech Environmental Laboratory of Mountainside, New Jersey, a New York State Environmental Laboratory Acceptance Program (ELAP) certified laboratory for analysis of Target Compound List (TCL) volatile organic compounds (VOCs) plus methyl tert-butyl ether (MTBE) per U.S. Environmental Protection Agency (USEPA) Method 8260. Table 2 summarizes

the groundwater analytical data. The laboratory analytical data report for the groundwater sample analysis is provided in Appendix B. Appendix C contains the laboratory certification forms.

No VOCs were detected in the trip blank indicating that the samples were not exposed to any environment that might impact the sample integrity. The field duplicate sample was collected from MW-3R, and both the sample and the duplicate contained cis 1,2-dichloroethene (an estimated concentration of 1.0 micrograms per liter [ $\mu\text{g/L}$ ] in MW-3R and an estimated concentration of 0.95  $\mu\text{g/L}$  in the duplicate) and tetrachloroethene (PCE) (2.3  $\mu\text{g/L}$  in MW-3R and 1.9  $\mu\text{g/L}$  in the duplicate). The corresponding concentrations are very similar. The MW-3R sample contained 1.1  $\mu\text{g/L}$  of 1,2,4-trichlorobenzene and none was detected in the duplicate sample. The field duplicate results indicate reasonably good precision in the laboratory analyses considering the concentrations are around the laboratory method reporting limit. Generally, all other laboratory QC criteria (e.g., surrogate and spike recoveries) were acceptable.

No VOCs were detected in the groundwater samples from two of the three downgradient monitoring wells (MW-5R and MW-11R). As noted above, three VOCs were detected in the groundwater sample collected from MW-3R: cis 1,2-dichloroethene was detected at an estimated concentration of 1.0  $\mu\text{g/L}$ ; PCE was detected at 2.3  $\mu\text{g/L}$ ; and 1,2,4-trichlorobenzene was detected at 1.1  $\mu\text{g/L}$ . None of the detected VOCs exceeded the corresponding New York State Class GA standards.

Two VOCs were detected in the groundwater sample collected from MW-25. Cis 1,2-dichloroethene was detected at a concentration of 1.0  $\mu\text{g/L}$ , which does not exceed the Class GA standard of 5.0  $\mu\text{g/L}$ . Benzene was detected at an estimated concentration of 0.66  $\mu\text{g/L}$ , which does not exceed the Class GA standard of 1.0  $\mu\text{g/L}$ . Cis 1,2-dichloroethene is not related to the contaminant sources (manufactured gas plant waste and petroleum release) identified during the RI, and is likely residual from an unidentified upgradient source(s). The low concentration of benzene detected in the groundwater sample collected from MW-25 is likely the result of minor residual on-site groundwater contamination remaining just outside of the Brownfield Cleanup Program (BCP) Area.

No VOCs were detected in the groundwater sample collected from monitoring well MW-26R. Two VOCs were detected in the groundwater sample collected from MW-23. Cis 1,2-dichloroethene was detected at a concentration of 2.8  $\mu\text{g/L}$  and does not exceed the Class GA standard of 5.0  $\mu\text{g/L}$ . Vinyl chloride was detected at 4.4  $\mu\text{g/L}$  which exceeds the Class GA standard of 2.0  $\mu\text{g/L}$ . These two VOCs are not related to the contaminant sources (manufactured gas plant waste and petroleum release) identified during the RI, and are likely from an unidentified upgradient source(s).

Three VOCs were detected in the groundwater sample collected from MW-24; PCE was detected at a concentration of 26  $\mu\text{g/L}$ , trichloroethene (TCE) was detected at a concentration of 4.7  $\mu\text{g/L}$ , and chloroform was detected at 1.7  $\mu\text{g/L}$ . In previous sampling events, PCE concentrations in groundwater from MW-24 have ranged from between 36 and 51  $\mu\text{g/L}$ . The Class GA standard for PCE is 5.0  $\mu\text{g/L}$ . TCE was detected once previously (March 10, 2010 sampling event) in the sample collected from MW-24. Neither detected concentration has exceeded the Class GA standard of 5.0  $\mu\text{g/L}$ . Chloroform was not detected in any of the previous groundwater monitoring samples collected on the Site. The chloroform concentration does not exceed the Class GA standard of 7.0  $\mu\text{g/L}$ . Monitoring well MW-24 is located on the upgradient side of the Site, and the PCE, TCE and chloroform detected in the groundwater sample from MW-24 are likely from upgradient sources.

The remedial objective for groundwater in the NYSDEC approved Remedial Action Work Plan (RAWP) is to maintain existing groundwater quality at the downgradient property line. Detections of VOCs were

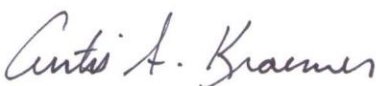
Mr. Vadim Brevdo  
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Page 3

limited to one of the three monitoring wells near the downgradient property line (MW-3R) and concentrations were below groundwater quality standards. Accordingly, the remedial objective for groundwater continues to be met per the RAWP.

Please do hesitate to call me at (212) 290-6031 if you have any questions or require additional information regarding this project.

Sincerely,

SHAW ENVIRONMENTAL, INC.



Curtis A. Kraemer, P.G.  
Senior Geologist



Michael R. Sherwood, CPG  
Client Program Manager

cc: C. Bethoney, NYSDOH  
L. Guterman, NYCSCA

Attachments: Appendix A-Field Sampling Logs  
Appendix B-Laboratory Analytical Data  
Appendix C-Laboratory Certification Forms



**Attachment 5**  
**Photographic Documentation**



Photo 1: View of typical SSDS roof fan unit (F-5).



Photo 2: View of typical malfunctioned vacuum gauge (F-5).



Photo 3: View of typical fan belt assembly (F-5).



Photo 4: View of auditorium floor in Room C20A.



Photo 5: View of typical monitoring point in Room C64F.



Photo 6: View of typical monitoring point in Room C62.



Photo 7: View of typical bare concrete floor in Stairwell 18.



Photo 8: View of typical bare concrete floor in Room C24A.



Photo 9: View of artificial turf on football field.



Photo 10: View of typical section of artificial turf.



Photo 11: View of typical sidewalk pavers and vegetation cover.



Photo 12: View of typical asphalt cover.

**Attachment 6**  
**Annual Inspection Forms**

Annual Inspection Form

Mott Haven Campus  
730 Concourse Village West, Bronx, New York 10451

Inspector's Name: Gilbert Gedeon  
Inspection Date: 9/20 & 21/2011  
Inspection Time: 10:30 AM  
Comments:

Weather Conditions: Cloudy  
Air Temperature (°F): 72°F

A. PRE INSPECTION CHECKLIST

- \* Schedule Annual Inspection when school is not occupied by students. ✓
- \* Review 12 Previous Monthly Inspection Checklists. ✓
- \* Meet with Custodian and Principal to solicit comments/concerns regarding the operation of the Engineering Controls over the last 12 months. ✓
- \* Conduct Annual Refresher SMP Training with DOE, DSF. ✓
- \* Comments:

B. SSDS SYSTEM INSPECTION

1. Walk the entire roof surface of school buildings.

- \* Inspect fan stack guy wires. ✓
- \* Inspect fan mounting and vibration isolators. ✓
- \* Inspect condition of fan belt. ✓
- \* Inspect alignment of fan belt. ✓
- \* Record vacuum gauge reading. N/A
- \* Inspect bolts and set screws for tightness and rusty condition. ✓
- \* Verify spare fan is available, properly lubricated, and properly stored. Being Ordered
- \* Verify spare fan parts (i.e. drive belts) are available and in good condition. ✓
- \* Inspect for cleanliness. Clean exterior surfaces only. Remove dust and grease on motor housing. ✓
- \* Are the indicator lights on the Building Management System functioning properly? No, being worked on
- \* Comments (see or hear anything unusual?):

C. COVER SYSTEM - BOTTOM FLOOR INSPECTION

1. Walk all of the bottom floors

- \* Any visible cracks or settlement in the ground floors? No
- \* Any other visible openings (unintended) in the ground floors? No
- \* Any other visible cracks in elevator pit or other accessible pits? No
- \* Draw approximate location of floor cracks/openings on site map. N/A
- \* Note the length of the crack/opening. N/A
- \* Note the width of the crack/opening. N/A
- \* Comments:



Annual Inspection Form

Mott Haven Campus  
730 Concourse Village West, Bronx, New York 10451

D. COVER SYSTEM - EXTERIOR INSPECTION (Including area under platform)

1. Walk and inspect the entire perimeter of the Site and the concrete cap under platform.
2. Walk and inspect all of the paved areas (concrete and asphalt) of the Site, including areas under PS 156 and IS 151.
3. Walk and inspect all of the unpaved areas of the Site including artificial turf field

- \* Are there any signs of significant cracks, settlement or deterioration of the paved areas? *No*
- \* Has any of the pavement material been removed? *No*
- \* Are there signs of vehicular use on the unpaved areas (tire tracks, rutting, etc.)? *No*
- \* Have any structures been constructed on the unpaved areas? *No*
- \* Inspect synthetic turf. Any problems identified? *No*
- \* Are the flush-mounted caps/protective casings for the 7 monitoring wells secured? *Yes*
- \* Are there any signs of soil washing or erosion (gullies, soil washed out onto the pavement)? *No*
- \* Are there any signs of intrusive activities (drilling, digging, trenching, grading, excavating, etc.)? *No*
- \* Comments:

E. VAPOR BARRIER INSPECTION

1. Walk all of the bottom floors

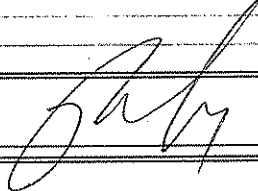
- \* Review all cracks or other openings indentified in ground floors during previous inspections. *N/A*
- \* Conduct smoke test at each identified crack/opening/depression using environmentally safe smoke. *N/A*
- \* Draw approximate location of floor cracks/openings that appear to have potential leak through vapor barrier. *N/A*
- \* Identify sources of potential impact to smoke test (i.e., HVAC vent nearby). *N/A*
- \* Redo smoke test at location of potential vapor barrier leak after sealing off sources of potential impact. *N/A*

Comments:

F. Repair

Summarize needed/completed repairs to Engineering Controls:

*BMS Programming is being addressed*

Inspector's Signature: 

**Attachment 7**  
**Correspondence Letter**



**Shaw Environmental, Inc.**

1633 Broadway, 30<sup>th</sup> Floor  
New York, NY 10019  
212-290-6000  
FAX: 212-290-6001

September 26, 2011

Mr. Srinivas Kanaparthi  
Industrial Hygienist, Industrial & Environmental Hygiene Division  
New York City School Construction Authority  
30-30 Thomson Avenue  
Long Island City, New York 11101

Re: Waterproofing Excavation in Maintenance Corridor  
Mott Haven Site  
730 Concourse Village West  
Bronx, New York 10451  
SCA LLW# 033485/SCA Job# 28646  
BCP No. C203030

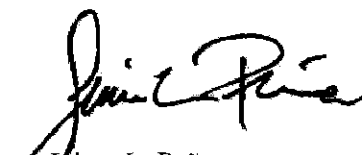
Dear Mr. Kanaparthi:

Between July-August 2011, and with concurrence from New York State Department of Environmental Conservation (DEC), construction activities were completed to mitigate water infiltration into the school originating from the Department of Transportation (DOT) maintenance corridor. These construction activities consisted of excavation within the corridor and replacement of the drainage system with new drainage piping, clean crushed stone, and concrete cap. Shaw Environmental, Inc. (Shaw) provided full time oversight of the construction work on behalf of New York City School Construction Authority (SCA). Shaw verified that the historic urban fill beneath the excavation area and the existing vapor barrier beneath the school buildings were not disturbed during this work. All construction work was conducted in compliance with the NYSDEC-approved Site Management Plan dated November 2008.


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

Sincerely,

**Shaw Environmental, Inc.**



Jaime L. Peña  
Project Manager



Curtis A. Kraemer, P.G.  
Senior Geologist



**Attachment 8**  
**Training Acknowledgement**



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**Annual Training Acknowledgement  
Engineering Controls Operation and Maintenance**

Location: 7790

Custodian/Fireman: Anthony Merino

I, Anthony Merino, received annual refresher training on Engineering Controls Operation and Maintenance by ATC Associates, Inc. on 9/20/11. 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: Anthony Merino  
Custodian/Fireman

[Signature]  
[Signature]

Date: 9/20/11

9/20/11

9/20/11