ANNUAL SITE MANAGEMENT REPORT
FROM AUGUST 2012 TO JULY 2013
MOTT HAVEN CAMPUS-X790
730 CONCOURSE VILLAGE WEST
BRONX, NEW YORK
BCP AGREEMENT # C-203030

PREPARED FOR:

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

PREPARED BY:

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

Date of Issue: September 10, 2013

Cardno ATC Project No. 015.19125.1675

TABLE OF CONTENTS

Attachments:

PROJECT DIRECTORY

CLIENT:	New York City Department of Education Office of Environmental Health and Safety 44-36 Vernon Blvd. Long Island City, New York 11101 (718) 361-3808
PROJECT LOCATION:	Mott Haven Campus - X790 730 Concourse Village West Bronx, New York, 10451 (718) 292-2036
PROJECT TECHNICAL SUPPORT	New York State Department of Environmental Conservation Division of Environmental Remediation, Region 2 47-40 21st Street Long Island City, New York 11101-5407 (718) 482-4891 New York City School Construction Authority 30-30 Thomson Avenue Long Island City, New York 11101 (718) 472-8000 TRC Engineers, Inc. 1430 Broadway New York, NY 10018 (212) 221-7822 STV Incorporated 225 Park Avenue South New York, NY 10003 (212) 777-4400
DESCRIPTION OF WORK:	Review Site Management Plan, O&M plan and prior reports; review custodian's inspection forms, walk-through visual inspection
ATC REPRESENTATIVES:	Gilbert Gedeon, PE, Division Manager Husam Zeidan, Inspector

EXECUTIVE SUMMARY

This Site Management Report (SMR) covers the period from August 1, 2012 to July 31, 2013 for PS 790X located at 730 Concourse Village West, Bronx, NY. This report is being submitted in response to the July 12, 2013 New York State Department of Environmental Conservation (NYSDEC) Reminder Notice included under Attachment 1. This SMR includes information based on the most recent annual site refresher training associated with the operation and maintenance of the sub-slab depressurization system (SSDS), vapor barrier and composite cover system, as well as the site inspection conducted on August 8, 2013 pursuant to the NYSDEC-approved Site Management Plan (SMP).

Following the events of Hurricane Sandy and at the request of the NYSDEC, ATC conducted a Severe Condition Inspection on November 8, 2012. ATC did not observe any issues with the Engineering Controls (ECs) and Institutional Controls (ICs), as previously submitted to NYSDEC.

The annual site inspection included an evaluation of engineering controls identified in the SMP which includes the vapor barrier, SSDS, and cover system established at the site. During this inspection, Cardno ATC (ATC) observed cracks in the concrete cap around two (2) manhole covers located under PS 156 and IS 151, and subsequently notified the New York City Department of Education (NYCDOE). NYCDOE repaired the cracks on September 4, 2013, and ATC verified the repairs on September 5, 2013. In addition, ATC reviewed the custodial inspection logs, and SSDS inspection and groundwater monitoring reports prepared by others.

Based on the visual inspection and document review, ATC concludes that the ECs and ICs have not changed, are effective, protect public health and the environment, and the remedial goals are being met. See Attachment 1 for the Institutional and Engineering Controls Certification Form.

1.0 INTRODUCTION

On behalf of the NYCDOE Office of Environmental Health and Safety (DOE/EHS), ATC is pleased to provide this SMR to NYSDEC for PS 790X located at 730 Concourse Village West in Bronx, NY. The campus opened in September 2010 and is currently attended by approximately 1,400 students. This report was completed in accordance with the SMP approved by the NYSDEC.

The scope of work for this report included:

1. Review of the school custodian's monthly inspection logs documenting 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. Gilbert Gedeon, P.E. and Mr. Husam Zeidan of ATC conducted an annual site inspection on August 8, 2013 accompanied by Mr. Robert Rivera Jr., the school's Custodian.

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 prevent direct contact with 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 slotted 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 installed on the school campus and also below the platform of PS 156 and IS 151 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, the concrete cap below the platforms that support PS 156 and IS 151, 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 matter 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 finds acceptable.

4.0 SITE INSPECTIONS AND SSDS REPAIRS

4.1 Document Review

4.1.1 Review of Custodian's Inspection Logs

ATC reviewed the daily inspection logs and monthly inspection forms with the custodial staff from August 2012 through July 2013. Inspection logs were not prepared for October 2012 through January 2013 due to a custodial staff change. However, ATC performed a post-Hurricane Sandy inspection on November 8, 2012 and TRC performed biweekly SSDS inspections during this period as indicated in Section 4.1.2 below. The Monthly Inspection Forms are included in Attachment 2.

4.1.2 Review of Biweekly Inspection Logs

ATC reviewed the biweekly logs prepared by SCA's representative TRC from August 2, 2012 to July 26, 2013 (See Attachment 3). Based on this review, ATC noted that all six (6) SSDS fan units were operating at the time of each inspection. In addition, vacuum gauges were installed by August 31, 2012. ATC also noted the BMS was operational, but did not register a change in fan status on January 30, 2013. The BMS has been fully commissioned as of March 2013.

4.1.3 Review of Semiannual Groundwater Monitoring Reports

The Site is currently undergoing a semiannual groundwater monitoring program until the upgradient contamination source is addressed. ATC reviewed the groundwater monitoring reports (Attachment 4) prepared by TRC and STV for April 2013 and June 2013 events, respectively. The reports were submitted to the NYSDEC by SCA on April 18, 2013 and July 15, 2013, respectively.

Summaries of the April 2013 and June 2013 groundwater sampling events are provided below:

April 2013 Sampling Event

On March 28, 2013 TRC collected ground water samples from the seven (7) existing groundwater monitoring wells. These samples were submitted to York Analytical Laboratories, Inc. of Stratford, Connecticut. No volatile organic compounds (VOC) were detected in two (2) of the three (3) downgradient monitoring wells (MW-5R and MW-11R). One (1) VOC was detected in the groundwater samples from MW-3R. The VOC did not exceed New York State Class GA standards. One (1) VOC was also detected in MW-24 below New York State Class

GA standards. One (1) VOC, tetrachloroethene (PCE) was detected in MW-24 at a concentration above the groundwater quality standard and is likely related to an upgradient source.

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

June 2013 Sampling Event

On June 15, 2013 STV collected ground water samples from the seven (7) existing groundwater monitoring wells. These samples were submitted to York Analytical Laboratories, Inc. of Stratford, Connecticut. For the downgradient monitoring wells one (1) VOC was detected in MW-11R and two (2) VOCs were detected in MW-3R and MW-5R. None of the VOC detections exceeded New York State Class GA standards. Two (2) VOCs were detected in MW-26R which were below Class GA standards. Four (4) VOCs detected in MW-23 did not exceed Class GA. One (1) of the three (3) VOCs, PCE, was detected in MW-24 at a concentration above the groundwater quality standard and is likely related to an upgradient source. One (1) VOC was detected in MW-25 which was below Class GA standards.

The remedial objective for groundwater in the NYSDEC-approved RAWP is to maintain groundwater quality at the downgradient property line. VOCs detections in three monitoring wells near the downgradient property line (MW-3R, MW-5R and MW-11R) were all below groundwater quality standards. The groundwater monitoring results demonstrated that the remedial objective for groundwater continues to be met per the RAWP.

4.2 ATC's Visual Observations

On August 8, 2013, 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:

- The BMS is fully commissioned; and
- A spare fan unit labeled EF-7 is available at the school and is located in Room B80.

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. All fan belts were aligned and in good condition. The custodial staff has been replacing worn belts on an as-needed basis;
4. Vacuum gauges on the SSDS fan units have been installed;

5. Guy wires of all SSDS fan units were observed to be tight and in good condition; and
6. Fan mounting and vibration isolators were intact.

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 site inspections. Furthermore, ATC did not observe any floor joints in the basement floor. As such, smoke testing consistent with Section 3.2.2 of the SMP 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 also inspected the DOT maintenance corridor and did not observe any visible cracks.

4.2.3 Exterior Inspection

ATC inspected the composite cover system around the perimeter of the Mott Haven Campus 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. 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. It is concluded that the composite cover system is intact and provides a barrier to direct contact with underlying soils.

ATC observed concrete cracks around two (2) manhole covers in the concrete cap located under PS 156 and IS 151. Subsequently, ATC notified DOE of the cracks and they were repaired on September 4, 2013. ATC verified the repairs on September 5, 2013.

5.0 CONCLUSIONS AND RECOMMENDATIONS

Based on visual observations, ATC concludes the following:

1. The SSDS is operational and is being monitored by the BMS;
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, remain effective and the remedial goals have been met;
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 documenting all operation and maintenance activities on ECs;
2. Conduct preventative maintenance and document accordingly; and
3. Continue to replace any worn fan belts.

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,
CARDNO ATC

Gilbert Gedeon, P.E.
Division Manager

cc: B. Orlan
Y. Efstathiou
H. Zeidan

Attachment 1
Institutional and Engineering Controls Certification Form

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

Joe Martens
Commissioner

7/12/2013

Lee Guterman
Deputy Director, IEH Division
New York City School Construction Authority
30-30 Thomson Ave
Long Island City, NY 11101-3045

Re: Reminder Notice: Site Management Periodic Review Report and IC/EC Certification Submittal
Site Name: Former Metro North Property
Site No.: C203030
Site Address: 730 Concourse Village West
New York, NY 10451

Dear Lee Guterman:

This letter serves as a reminder that sites in active Site Management (SM) require the submittal of a periodic progress report. This report, referred to as the Periodic Review Report (PRR), must document the implementation of, and compliance with, site specific SM requirements. Section 6.3(b) of DER-10 *Technical Guidance for Site Investigation and Remediation* (available online at http://www.dec.ny.gov/regulations/67386.html) provides guidance regarding the information that must be included in the PRR. Further, if the site is comprised of multiple parcels, then you as the Certifying Party must arrange to submit one PRR for all parcels that comprise the site. The PRR must be received by the Department no later than **September 12, 2013**. Guidance on the content of a PRR is enclosed.

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

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

When you submit the PRR (by the due date above), include the enclosed forms documenting that all SM requirements are being met. The Institutional Controls (ICs) portion of the form (Box 6) must be signed by you or your designated representative. The Engineering Controls (ECs) portion of the form (Box 7) must be signed by a Professional Engineer (PE). If you cannot certify that all SM requirements are being met, you must submit a Corrective Measures Work Plan that identifies the actions to be taken to restore compliance. The work plan must include a schedule to be approved by the Department. The Periodic Review process will not be considered complete until all necessary corrective measures are completed and all required controls are certified. Instructions for completing the certifications are enclosed.

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

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

The signed certification forms should be sent to Sondra Martinkat-Taule, Project Manager, at the following address:

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

Phone number: 718-482-4891. E-mail: smmartin@gw.dec.state.ny.us

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

Enclosures

PRR General Guidance
Certification Form Instructions
Certification Forms

cc: w/ enclosures

City of New York

ec: w/ enclosures

Sondra Martinkat-Taule, Project Manager
Jane O'Connell, Hazardous Waste Remediation Engineer, Region 2
Dawn Hettrick, NYSDOH

Enclosure 1

Certification Instructions

I. Verification of Site Details (Box 1 and Box 2):

Answer the three questions in the Verification of Site Details Section. The Owner and/or Qualified Environmental Professional (QEP) may include handwritten changes and/or other supporting documentation, as necessary.

II. Certification of Institutional Controls/ Engineering Controls (IC/ECs)(Boxes 3, 4, and 5)

1.1.1. Review the listed IC/ECs, confirming that all existing controls are listed, and that all existing controls are still applicable. If there is a control that is no longer applicable the Owner / Remedial Party should petition the Department separately to request approval to remove the control.

2. In Box 5, complete certifications for all Plan components, as applicable, by checking the corresponding checkbox.

3. If you cannot certify "YES" for each Control listed in Box 3 & Box 4, sign and date the form in Box 5. Attach supporting documentation that explains why the **Certification** cannot be rendered, as well as a plan of proposed corrective measures, and an associated schedule for completing the corrective measures. Note that this **Certification** form must be submitted even if an IC or EC cannot be certified; however, the certification process will not be considered complete until corrective action is completed.

If the Department concurs with the explanation, the proposed corrective measures, and the proposed schedule, a letter authorizing the implementation of those corrective measures will be issued by the Department's Project Manager. Once the corrective measures are complete, a new Periodic Review Report (with IC/EC Certification) must be submitted within 45 days to the Department. If the Department has any questions or concerns regarding the PRR and/or completion of the IC/EC Certification, the Project Manager will contact you.

III. IC/EC Certification by Signature (Box 6 and Box 7):

If you certified "YES" for each Control, please complete and sign the IC/EC Certifications page as follows:

- For the Institutional Controls on the use of the property, the certification statement in Box 6 shall be completed and may be made by the property owner or designated representative.

- For the Engineering Controls, the certification statement in Box 7 must be completed by a Professional Engineer or Qualified Environmental Professional, as noted on the form.

Enclosure 2

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

Site Details **Box 1**

Site No. **C203030**

Site Name Former Metro North Property

Site Address: 730 Concourse Village West Zip Code: 10451
City/Town: New York
County: Bronx
Site Acreage: 0.9

Reporting Period: August 01, 2012 to July 31, 2013

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

Box 2

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

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

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

Signature of Owner, Remedial Party or Designated Representative

Date

Box 2A

	YES	NO
8. Has any new information revealed that assumptions made in the Qualitative Exposure Assessment regarding offsite contamination are no longer valid?	☐	☑
If you answered YES to question 8, include documentation or evidence that documentation has been previously submitted with this certification form.		
9. Are the assumptions in the Qualitative Exposure Assessment still valid? (The Qualitative Exposure Assessment must be certified every five years)	☑	☐
If you answered NO to question 9, the Periodic Review Report must include an updated Qualitative Exposure Assessment based on the new assumptions.		

SITE NO. C203030

Box 3

Description of Institutional Controls

Parcel	Owner	Institutional Control
9-2443-78 P/O	City of New York	Ground Water Use Restriction Soil Management Plan Landuse Restriction Building Use Restriction Monitoring Plan Site Management Plan O&M Plan IC/EC Plan

ICs:
Compliance with the Environmental Easement and DCR.
All ECs must be operated and maintained as specified in SMP
Cover systems inspection, certification, and maintenance.
Soil Vapor Mitigation system consisting of vapor Barrier and SSDS must be inspected, certified, and maintained as required in SMP. All ECs must be inspected and certified at frequency specified in SMP. Groundwater monitoring must be performed as specified in SMP. Groundwater monitoring wells must be protected and replaced as necessary to ensure compliance with SMP. ECs may not be discontinued or amended without concurrence from NYSDEC and NYSDOH. Vegetable gardens and farming at the property is prohibited. The use of groundwater property is prohibited. All activities disturbing urban fill materials are prohibited. Controlled property can only be used as a school provided long term ICs and ECs are employed as specified in SMP.

Box 4

Description of Engineering Controls

Parcel	Engineering Control
9-2443-78 P/O	Vapor Mitigation Groundwater Containment Subsurface Barriers Fencing/Access Control

ECs:
Cover Systems
Vapor Barrier
Jet Grout Hydraulic Barrier
Waterloo Hydraulic Barrier
SSDS

Box 5

Periodic Review Report (PRR) Certification Statements

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

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

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

YES	NO
☑	☐

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

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

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

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

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

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

YES	NO
☑	☐

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

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

_____ _____

Signature of Owner, Remedial Party or Designated Representative — Date

IC CERTIFICATIONS
SITE NO. C203030

Box 6

SITE OWNER OR DESIGNATED REPRESENTATIVE SIGNATURE

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

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

am certifying as OWNER (Owner or Remedial Party)

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

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

8/19/13
Date

IC/EC CERTIFICATIONS

Box 7

Professional Engineer Signature

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

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

am certifying as a Professional Engineer for the NYC Dept. of Education
(Owner or Remedial Party)

STATE OF NEW YORK GILBERT GEDEON 075399 LICENSED PROFESSIONAL ENGINEER

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

Stamp (Required for PE)

9/10/13
Date

Enclosure 3
Periodic Review Report (PRR) General Guidance

I. Executive Summary: (1/2-page or less)
   A. Provide a brief summary of site, nature and extent of contamination, and remedial history.
   B. Effectiveness of the Remedial Program - Provide overall conclusions regarding;
      1. progress made during the reporting period toward meeting the remedial objectives for the site
      2. the ultimate ability of the remedial program to achieve the remedial objectives for the site.
   C. Compliance
      1. Identify any areas of non-compliance regarding the major elements of the Site Management Plan (SMP, i.e., the Institutional/Engineering Control (IC/EC) Plan, the Monitoring Plan, and the Operation & Maintenance (O&M) Plan).
      2. Propose steps to be taken and a schedule to correct any areas of non-compliance.
   D. Recommendations
      1. recommend whether any changes to the SMP are needed
      2. recommend any changes to the frequency for submittal of PRRs (increase, decrease)
      3. recommend whether the requirements for discontinuing site management have been met.

II. Site Overview (one page or less)
   A. Describe the site location, boundaries (figure), significant features, surrounding area, and the nature and extent of contamination prior to site remediation.
   B. Describe the chronology of the main features of the remedial program for the site, the components of the selected remedy, cleanup goals, site closure criteria, and any significant changes to the selected remedy that have been made since remedy selection.

III. Evaluate Remedy Performance, Effectiveness, and Protectiveness
   Using tables, graphs, charts and bulleted text to the extent practicable, describe the effectiveness of the remedy in achieving the remedial goals for the site. Base findings, recommendations, and conclusions on objective data. Evaluations and should be presented simply and concisely.

IV. IC/EC Plan Compliance Report (if applicable)
   A. IC/EC Requirements and Compliance
      1. Describe each control, its objective, and how performance of the control is evaluated.
      2. Summarize the status of each goal (whether it is fully in place and its effectiveness).
      3. Corrective Measures: describe steps proposed to address any deficiencies in ICECs.
      4. Conclusions and recommendations for changes.
   B. IC/EC Certification
      1. The certification must be complete (even if there are IC/EC deficiencies), and certified by the appropriate party as set forth in a Department-approved certification form(s).

V. Monitoring Plan Compliance Report (if applicable)
   A. Components of the Monitoring Plan (tabular presentations preferred) - Describe the requirements of the monitoring plan by media (i.e., soil, groundwater, sediment, etc.) and by any remedial technologies being used at the site.
   B. Summary of Monitoring Completed During Reporting Period - Describe the monitoring tasks actually completed during this PRR reporting period. Tables and/or figures should be used to show all data.
   C. Comparisons with Remedial Objectives - Compare the results of all monitoring with the remedial objectives for the site. Include trend analyses where possible.
   D. Monitoring Deficiencies - Describe any ways in which monitoring did not fully comply with the monitoring plan.
   E. Conclusions and Recommendations for Changes - Provide overall conclusions regarding the monitoring completed and the resulting evaluations regarding remedial effectiveness.

VI. Operation & Maintenance (O&M) Plan Compliance Report (if applicable)
   A. Components of O&M Plan - Describe the requirements of the O&M plan including required activities, frequencies, recordkeeping, etc.
   B. Summary of O&M Completed During Reporting Period - Describe the O&M tasks actually completed during this PRR reporting period.
   C. Evaluation of Remedial Systems - Based upon the results of the O&M activities completed, evaluated the ability of each component of the remedy subject to O&M requirements to perform as

designed/expected.

D. O&M Deficiencies - Identify any deficiencies in complying with the O&M plan during this PRR reporting period.

E. Conclusions and Recommendations for Improvements - Provide an overall conclusion regarding O&M for the site and identify any suggested improvements requiring changes in the O&M Plan.

VII. Overall PRR Conclusions and Recommendations

A. Compliance with SMP - For each component of the SMP (i.e., IC/EC, monitoring, O&M), summarize;
   1. whether all requirements of each plan were met during the reporting period
   2. any requirements not met
   3. proposed plans and a schedule for coming into full compliance.

B. Performance and Effectiveness of the Remedy - Based upon your evaluation of the components of the SMP, form conclusions about the performance of each component and the ability of the remedy to achieve the remedial objectives for the site.

C. Future PRR Submittals
   1. Recommend, with supporting justification, whether the frequency of the submittal of PRRs should be changed (either increased or decreased).
   2. If the requirements for site closure have been achieved, contact the Departments Project Manager for the site to determine what, if any, additional documentation is needed to support a decision to discontinue site management.

VIII. Additional Guidance

Additional guidance regarding the preparation and submittal of an acceptable PRR can be obtained from the Departments Project Manager for the site.

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: A. Mariano
Inspection Date: 8/25/17
Inspection Time: 8:30 A.M
Weather Conditions: Clear
Air Temperature (°F): 68 S F
Comments:

A. SSDS SYSTEM INSPECTION

1. Walk the entire roof surface of school bulidings.

* 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?):	✓
	✓
	✓

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:	

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)?	✓
* 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: A. Mariano
Inspection Date: 9/22/12
Inspection Time: 10:00 A.M
Weather Conditions: Clear.
Air Temperature (°F): 61° F
Comments:

A. SSDS SYSTEM INSPECTION

1. Walk the entire roof surface of school bulidings.

*	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:	✓
*	Inspect bolts and set screws for tightness and rusty condition.	✓
*	Inspect for cleanliness. Clean exterior surfaces only. Remove dust and grease on motor housing.	✓
*	Is the Building Management System monitoring SSDS fans and 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?):	✓
		✓

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:	✓

C. COVER SYSTEM - EXTERIOR INSPECTION (including area under platform)

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 and under platform.

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)?	✓
*	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:	Robert Rivera Jr	Weather Conditions:	Cloudy
Inspection Date:	2-4-13	Air Temperature (°F):	28°F
Inspection Time:	1:00pm		
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?	NO
*	Confirm that spare fan is stored in designated secure location and in working condition.	✓ S.S.D
*	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?):	N/A

B. COVER SYSTEM - BOTTOM FLOOR INSPECTION

1. Walk all of the bottom floors

*	Any visible cracks or depressions in the ground floors?	NO
*	Any other visible openings (unintended) in the ground floors?	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:	N/A

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?	NO ~~YES~~	R.R
*	Has any of the pavement material been removed?	NO ~~YES~~	R.R
*	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	
*	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:		

D. REPAIRS

Summarize needed/completed repairs to Engineering Controls:

Inspector's Signature: Robert Rivera Jr

Monthly/Severe Condition Inspection Form

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

Inspector's Name:	Robert Rivera JR	Weather Conditions:	Clear
Inspection Date:	3-29-13	Air Temperature (°F):	47°F
Inspection Time:	10:30am.		
Comments:	~~IT~~		

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?	NO
*	Confirm that spare fan is stored in designated secure location and in working condition.	✓ 0830
*	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?):	N/A

B. COVER SYSTEM - BOTTOM FLOOR INSPECTION

1. Walk all of the bottom floors

*	Any visible cracks or depressions in the ground floors?	NO
*	Any other visible openings (unintended) in the ground floors?	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:	N/A

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?	NO ~~YES~~	R.R
*	Has any of the pavement material been removed?	NO ~~YES~~	R.R.
*	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	
*	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:	N/A	

D. REPAIRS

Summarize needed/completed repairs to Engineering Controls:

Inspector's Signature: Robert Rivera Jr

Monthly/Severe Condition Inspection Form

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

Inspector's Name: Robert Rivera JR
Inspection Date: 4-8-13
Inspection Time: 11:23 am
Weather Conditions: Clear SKIES
Air Temperature (°F): 70°F
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?	NO
* Confirm that spare fan is stored in designated secure location and in working condition.	✓ B30
* 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?	NO
* Any other visible openings (unintended) in the ground floors?	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:	N/A

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?	~~YES~~ NO
* Has any of the pavement material been removed?	~~YES~~ 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
* 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:	

D. REPAIRS

Summarize needed/completed repairs to Engineering Controls:

Inspector's Signature: Robert Rivera J

Monthly/Severe Condition Inspection Form

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

Inspector's Name:	Robert Rivera Jr	Weather Conditions:	Clear skies
Inspection Date:	May 22nd	Air Temperature (°F):	76°F
Inspection Time:	10:20 am		
Comments:			

A. SSDS SYSTEM INSPECTION

1. Walk the entire roof surface of school bulidings.

*	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?	Yes
*	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?):	ND

B. COVER SYSTEM - BOTTOM FLOOR INSPECTION

1. Walk all of the bottom floors

*	Any visible cracks or depressions in the ground floors?	No
*	Any other visible openings (unintended) in the ground floors?	ND
*	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:	N/A

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?	NO ~~Yes~~	2.R
*	Has any of the pavement material been removed?	NO ~~Yes~~	R.R
*	Are there signs of vehicular use on the unpaved areas (tire tracks, rutting, etc.)?	ND	
*	Have any structures been constructed on the unpaved areas?	ND	
*	Are there any signs of soil washing or erosion (gullies, soil washed out onto the pavement)?	ND	
*	Are there any signs of intrusive activities (drilling, digging, trenching, grading, excavating, etc.)?	ND	
*	Comments:		

D. REPAIRS

Summarize needed/completed repairs to Engineering Controls:

Inspector's Signature: Robert Rivera Jr

Monthly/Severe Condition Inspection Form

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

Inspector's Name:	Robert Rivera JR	Weather Conditions:	Cloudy Skies
Inspection Date:	6-16-13	Air Temperature (°F):	79°F
Inspection Time:	12:05		
Comments:			

A. SSDS SYSTEM INSPECTION

1. Walk the entire roof surface of school bulidings.

* 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?	Yes
* 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?	No
* Any other visible openings (unintended) in the ground floors?	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:	N/A

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?	NO ~~Yes~~ R.R
* Has any of the pavement material been removed?	NO ~~Yes~~ R.R
* 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
* 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:	

D. REPAIRS

Summarize needed/completed repairs to Engineering Controls:

Inspector's Signature: Robert Rivera Jr

Monthly/Severe Condition Inspection Form

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

Inspector's Name: Robert Rweracse
Inspection Date: 7/2/13
Inspection Time: 10:00 am
Weather Conditions: Clear
Air Temperature (°F): 91°F
Comments:

A. SSDS SYSTEM INSPECTION

1. Walk the entire roof surface of school buildings.

*	Inspect fan stack guide wires.	J
*	Inspect fan mounting and vibration isolators.	J
*	Inspect condition of fan belt.	J
*	Inspect alignment of fan belt.	J
*	Record vacuum gauge reading:	J
*	Inspect bolts and set screws for tightness and rusty condition.	J
*	Inspect for cleanliness. Clean exterior surfaces only. Remove dust and grease on motor housing.	J
*	Are the indicator lights on the Building Management System functioning properly?	YES
*	Confirm that spare fan is stored in designated secure location and in working condition.	J
*	Confirm that the spare fan's bearings are completely filled with grease/lubricant.	J
*	Rotate the fan wheel of the spare fan several times to ensure that bearings remain lubricated.	J
*	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?	NO
*	Any other visible openings (unintended) in the ground floors?	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:	N/A

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?	NO ~~YES~~ R.R
*	Has any of the pavement material been removed?	NO ~~YES~~ R.R
*	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
*	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:	

D. REPAIRS

Summarize needed/completed repairs to Engineering Controls:

Inspector's Signature: Robert Rweracse

Attachment 3
Biweekly Inspection Logs

1430 Broadway
10th Floor
New York, NY 10018

212.221.7822 PHONE
212.221.7840 FAX

www.TRCsolutions.com

August 2, 2013

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

Re: SSDS Certification
Mott Haven Campus – X790
730 Concourse Village West
Bronx, New York
SCA LLW# 033485, Job# 34857
NYSDEC BCP No. C203030

Dear Ms. Guterman:

In connection with the Mott Haven Campus located at 730 Concourse Village West, Bronx, New York, please accept this letter as certification that TRC Engineers, Inc. (TRC) performed biweekly inspections of the sub-slab depressurization system (SSDS) between August 3, 2012 and July 26, 2013 on behalf of the New York City School Construction Authority, in accordance with the New York State Department of Environmental Conservation-approved November 2008 Site Management Plan. The SSDS fans were operating normally during each TRC inspection completed during the time period.

Sincerely,
TRC Engineers, Inc.

David S. Glass, P.E.
NYS Professional Engineer License No. 068884

Attachment A – TRC SSDS Inspection Reports (8/3/12 through 7/26/13)

FIELD ACTIVITY DAILY LOG

1430 Broadway
10th Floor
New York, NY 10018

212.221.7822 PHONE
212.221.7840 FAX

www.TRCsolutions.com

Date: 8/3/12
Project Name: NYCSCA Mott Haven
Field Activity Subject: SSDS Bi-Weekly Inspection
Description of Daily Activities and Events:

- TRC on-site.
- Checked in with custodian's office to sign in.
- All SSDS fans were inspected and all SSDS fans were operating normally.
- Pressure gauges are not installed at fan inlets.
- The Building Management System (BMS) is not yet functional at this school.

FIELD ACTIVITY DAILY LOG

1430 Broadway
10th Floor
New York, NY 10018

212.221.7822 PHONE
212.221.7840 FAX

www.TRCsolutions.com

Date: 8/16/12
Project Name: NYCSCA Mott Haven
Field Activity Subject: SSDS Bi-Weekly Inspection
Description of Daily Activities and Events:

- TRC on-site.
- Checked in with custodian's office to sign in.
- All SSDS fans were inspected and all SSDS fans were operating normally.
- A Contractor was onsite working on installing SSDS accessories (performing Bulletin work).
- The Building Management System (BMS) is not yet functional at this school.

FIELD ACTIVITY DAILY LOG

1430 Broadway
10th Floor
New York, NY 10018

212.221.7822 PHONE
212.221.7840 FAX

www.TRCsolutions.com

Date: 8/31/12
Project Name: NYCSCA Mott Haven
Field Activity Subject: SSDS Bi-Weekly Inspection
Description of Daily Activities and Events:

- TRC on-site.
- Checked in with custodian's office to sign in.
- All SSDS fans were inspected and all SSDS fans were operating normally.
- Installation of SSDS accessories (Bulletin work) has been completed at the site. The specified pressure switches and vacuum gauges have been installed at each SSDS suction fan location.

FIELD ACTIVITY DAILY LOG

1430 Broadway
10th Floor
New York, NY 10018

212.221.7822 PHONE
212.221.7840 FAX

www.TRCsolutions.com

Date: 9/13/12
Project Name: NYCSCA Mott Haven
Field Activity Subject: SSDS Bi-Weekly Inspection
Description of Daily Activities and Events:

- TRC on-site.
- Checked in with custodian's office to sign in.
- All SSDS fans were inspected and all SSDS fans were operating normally.
- Installation of SSDS accessories (Bulletin work) has been completed at the site. The specified pressure switches and vacuum gauges have been installed at each SSDS suction fan location.

FIELD ACTIVITY DAILY LOG

1430 Broadway
10th Floor
New York, NY 10018

212.221.7822 PHONE
212.221.7840 FAX

www.TRCsolutions.com

Date: 9/27/12
Project Name: NYCSCA Mott Haven
Field Activity Subject: SSDS Bi-Weekly Inspection
Description of Daily Activities and Events:

- TRC and IEH (S. Kline) on-site.
- Checked in with custodian's office to sign in.
- All SSDS fans were inspected and all SSDS fans were operating normally.
- Installation of SSDS accessories (Bulletin work) has been completed at the site. The specified pressure switches and vacuum gauges have been installed at each SSDS suction fan location.
- TRC and the IEH representative attempted to test the functionality of the pressure switch alarm at the BMS. FMSI stated that they were having technical issues and a test was not possible.

FIELD ACTIVITY DAILY LOG

1430 Broadway
10th Floor
New York, NY 10018

212.221.7822 PHONE
212.221.7840 FAX

www.TRCsolutions.com

Date: 10/11/12
Project Name: NYCSCA Mott Haven
Field Activity Subject: SSDS Bi-Weekly Inspection
Description of Daily Activities and Events:

- TRC on-site.
- Checked in with custodian's office to sign in.
- All SSDS fans were inspected and all SSDS fans were operating normally.
- Installation of SSDS accessories (Bulletin work) has been completed at the site. The specified pressure switches and vacuum gauges have been installed at each SSDS suction fan location.

1430 Broadway
10th Floor
New York, NY 10018

212.221.7822 PHONE
212.221.7840 FAX

www.TRCsolutions.com

FIELD ACTIVITY DAILY LOG

Date: 10/26/12

Project Name: Mott Haven

Field Activity Subject: Sub-Slab Depressurization System (SSDS) Bi-Weekly Inspection

Description of Daily Activities and Events:

- TRC on-site.
- Checked in with custodian's office to sign in.
- All six SSDS fans were inspected and all SSDS fans were operating normally. The pressure gauge reading were recorded as follows:

    1. EF-1 - 4.0 Inches of water
    2. EF-2 - 2.5 Inches of water
    3. EF-3 - 4.0 Inches of water
    4. EF-4 - 4.5 Inches of water
    5. EF-5 - 4.5 Inches of water
    6. EF-6 - 4.0 Inches of water

- Project Officer Mr. Ramon Carrion stated that they are working with the BMS contractor to get the SSDS to display correctly on the BMS server.

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FIELD ACTIVITY DAILY LOG

Date: 11/8/12

Project Name: NYCSCA Mott Haven
LLW No.: 033485
IEH No.: 19730
TRC Project No.: 192455

Field Activity Subject: Sub-Slab Depressurization System (SSDS) Bi-Weekly Inspection

Description of Daily Activities and Events:

- TRC on-site.
- Checked in with front desk and custodian's office to sign in.
- All six SSDS suction fans were operating. The pressure gauge reading were recorded as follows:

    a. EF-1: – 4.5 Inches of water
    b. EF-2: – 2.0 Inches of water
    c. EF-3: – 4.5 Inches of water
    d. EF-4: – 4.5 Inches of water
    e. EF-5: – 5.0 Inches of water
    f. EF-6: – 4.5 Inches of water

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FIELD ACTIVITY DAILY LOG

Date: 11/19/12

Project Name: NYCSCA Mott Haven
LLW No.: 033485
IEH No.: 19730
TRC Project No.: 192455

Field Activity Subject: Sub-Slab Depressurization System (SSDS) Bi-Weekly Inspection

Description of Daily Activities and Events:

- TRC on-site.
- Checked in with front desk and custodian's office to sign in.
- All six SSDS suction fans were operating.
- Pressure gauges have been installed near SSDS suction fan inlets. The vacuum recorded at the inlets of the following SSDS suction fans were:

    a. EF-1: – 4.5 Inches of water column
    b. EF-2: – 2.0 Inches of water column
    c. EF-3: – 4.5 Inches of water column
    d. EF-4: – 5.0 Inches of water column
    e. EF-5: – 4.5 Inches of water column
    f. EF-6: – 4.5 Inches of water column

- Pressure switches have been installed near each fan inlet at the roof level. The flow switches remain installed as well, but they are not wired to the BMS.

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FIELD ACTIVITY DAILY LOG

Date: 12/4/12

Project Name: NYCSCA Mott Haven
LLW No.: 033485
IEH No.: 41747
TRC Project No.: 192455

Field Activity Subject: Sub-Slab Depressurization System (SSDS) Bi-Weekly Inspection

Description of Daily Activities and Events:

- TRC on-site.
- Checked in with front desk and custodian's office to sign in.
- All six SSDS suction fans were operating.
- Pressure switches have been installed near each fan inlet at the roof level. The flow switches remain installed, but they are no longer wired to the BMS.

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FIELD ACTIVITY DAILY LOG

Date: 12/19/12

Project Name: NYCSCA Mott Haven
LLW No.: 033485
IEH No.: 41747
TRC Project No.: 192455

Field Activity Subject: Sub-Slab Depressurization System (SSDS) Bi-Weekly Inspection

Description of Daily Activities and Events:

- TRC on-site.
- Checked in with front desk and custodian's office to sign in.
- All six SSDS suction fans were operating.
- Pressure switches have been installed near each fan inlet at the roof level. The flow switches remain installed, but they are no longer wired to the BMS.

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FIELD ACTIVITY DAILY LOG

Date: 1/3/13

Project Name: NYCSCA Mott Haven
LLW No.: 033485
IEH No.: 41747
TRC Project No.: 192455

Field Activity Subject: Sub-Slab Depressurization System (SSDS) Bi-Weekly Inspection

Description of Daily Activities and Events:

- TRC on-site.
- Checked in with front desk and custodian's office to sign in.
- All six SSDS suction fans were operating.
- Pressure switches have been installed near each fan inlet at the roof level. The flow switches remain installed, but they are no longer wired to the BMS.

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FIELD ACTIVITY DAILY LOG

Date: 1/14/13

Project Name: NYCSCA Mott Haven
LLW No.: 033485
IEH No.: 41747
TRC Project No.: 192455

Field Activity Subject: Sub-Slab Depressurization System (SSDS) Bi-Weekly Inspection

Description of Daily Activities and Events:

- TRC on-site.
- Checked in with front desk and custodian's office to sign in.
- All six SSDS suction fans were operating.
- Pressure gauges installed near the SSDS suction fan inlets read between 2.5 and 5.0 inches of water vacuum
- Pressure switches have been installed near each fan inlet at the roof level.

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FIELD ACTIVITY DAILY LOG

Date: 1/30/13

Project Name: NYCSCA Mott Haven
LLW No.: 033485
IEH No.: 41747
TRC Project No.: 192455

Field Activity Subject: Sub-Slab Depressurization System (SSDS) Bi-Weekly Inspection

Description of Daily Activities and Events:

- TRC on-site.
- Checked in with front desk and custodian's office to sign in.
- All six SSDS suction fans were operating.
- Pressure gauges installed near the SSDS suction fan inlets read approximately 4.0 inches of water vacuum at all fan installations.
- Pressure switches have been installed near each fan inlet at the roof level.
- TRC tested the functionality of the pressure switches at each fan by independently turning off each fan unit. The BMS did not register a change in the fan status for any pressure switch.

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FIELD ACTIVITY DAILY LOG

Date: 2/15/13

Project Name: NYCSCA Mott Haven
LLW No.: 033485
IEH No.: 41747
TRC Project No.: 192455

Field Activity Subject: Sub-Slab Depressurization System (SSDS) Bi-Weekly Inspection

Description of Daily Activities and Events:

- TRC on-site.
- Checked in with front desk and custodian's office to sign in.
- All six SSDS suction fans were operating.
- Pressure gauges installed near the SSDS suction fan inlets read between 4.25 to 5.0 inches of water vacuum at all fan installations.
- Pressure switches have been installed near each fan inlet at the roof level.

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FIELD ACTIVITY DAILY LOG

Date: 2/25/13

Project Name: NYCSCA Mott Haven
LLW No.: 033485
IEH No.: 41747
TRC Project No.: 192455

Field Activity Subject: Sub-Slab Depressurization System (SSDS) Bi-Weekly Inspection

Description of Daily Activities and Events:

- TRC on-site.
- Checked in with front desk and custodian's office to sign in.
- All six SSDS suction fans were operating.
- See below for pressure gauge readings from for each suction fan installation.

  Building "D":
  - EF–4: 5.0 inches of water vacuum

  Building "C":
  - EF–3: 4.5 inches of water vacuum

  Building "B":
  - EF–2: 4.25 inches of water vacuum
  - EF–6: 4.5 inches of water vacuum

  Building "A":
  - EF–1: 4.5 inches of water vacuum
  - EF–5: 5.0 inches of water vacuum

- Pressure switches have been installed near each fan inlet at the roof level.
- The Building Management System (BMS) is up and running but did not register a change in the fan status.

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FIELD ACTIVITY DAILY LOG

Date: 3/13/13

Project Name: NYCSCA Mott Haven
LLW No.: 033485
IEH No.: 41747
TRC Project No.: 192455

Field Activity Subject: Sub-Slab Depressurization System (SSDS) Bi-Weekly Inspection

Description of Daily Activities and Events:

- TRC on-site.
- Checked in with front desk and custodian's office to sign in.
- All six SSDS suction fans were operating.
- See below for pressure gauge readings from for each suction fan installation.

  Building "D":
  - EF–4: 5.0 inches of water vacuum

  Building "C":
  - EF–3: 4.5 inches of water vacuum

  Building "B":
  - EF–2: 4.25 inches of water vacuum
  - EF–6: 4.5 inches of water vacuum

  Building "A":
  - EF–1: 4.5 inches of water vacuum
  - EF–5: 5.0 inches of water vacuum

- Pressure switches have been installed near each fan inlet at the roof level.
- The Building Management System (BMS) is up and running.

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FIELD ACTIVITY DAILY LOG

Date: 3/27/13

Project Name: NYCSCA Mott Haven
LLW No.: 033485
IEH No.: 41747
TRC Project No.: 192455

Field Activity Subject: Sub-Slab Depressurization System (SSDS) Bi-Weekly Inspection

Description of Daily Activities and Events:

- TRC on-site.
- Checked in with front desk and custodian's office to sign in.
- All six SSDS suction fans were operating.
- See below for pressure gauge readings from for each suction fan installation.

  Building "D":
  - EF–4: 5.0 inches of water vacuum

  Building "C":
  - EF–3: 4.5 inches of water vacuum

  Building "B":
  - EF–2: 4.25 inches of water vacuum
  - EF–6: 4.5 inches of water vacuum

  Building "A":
  - EF–1: 4.5 inches of water vacuum
  - EF–5: 5.0 inches of water vacuum

- Pressure switches have been installed near each fan inlet at the roof level. The Building Management System (BMS) is up and running.

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FIELD ACTIVITY DAILY LOG

Date: 4/09/13

Project Name: NYCSCA Mott Haven
LLW No.: 033485
IEH No.: 41747
TRC Project No.: 192455

Field Activity Subject: Sub-Slab Depressurization System (SSDS) Bi-Weekly Inspection

Description of Daily Activities and Events:

- TRC on-site.
- Checked in with front desk and custodian's office to sign in.
- All six SSDS suction fans were operating.
- See below for pressure gauge readings from for each suction fan installation.

  Building "D":
  - EF–4: 5.00 inches of water vacuum

  Building "C":
  - EF–3: 4.50 inches of water vacuum

  Building "B":
  - EF–2: 4.25 inches of water vacuum
  - EF–6: 4.50 inches of water vacuum

  Building "A":
  - EF–1: 4.50 inches of water vacuum
  - EF–5: 5.00 inches of water vacuum

- The Building Management System (BMS) is up and running.

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FIELD ACTIVITY DAILY LOG

Date: 4/26/13

Project Name: NYCSCA Mott Haven
LLW No.: 033485
IEH No.: 41747
TRC Project No.: 192455

Field Activity Subject: Sub-Slab Depressurization System (SSDS) Bi-Weekly Inspection

Description of Daily Activities and Events:

- TRC on-site.
- Checked in with front desk and custodian's office to sign in.
- All six SSDS suction fans were operating.
- See below for pressure gauge readings from for each suction fan installation.

  Building "D":
  - EF–4: 5.00 inches of water vacuum

  Building "C":
  - EF–3: 4.50 inches of water vacuum

  Building "B":
  - EF–2: 5.00 inches of water vacuum
  - EF–6: 4.50 inches of water vacuum

  Building "A":
  - EF–1: 5.00 inches of water vacuum
  - EF–5: 4.50 inches of water vacuum

- Pressure switches have been installed near each fan inlet at the roof level.
- The Building Management System (BMS) is up and running.

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FIELD ACTIVITY DAILY LOG

Date: 5/06/13

Project Name: NYCSCA Mott Haven
LLW No.: 033485
IEH No.: 41747
TRC Project No.: 192455

Field Activity Subject: Sub-Slab Depressurization System (SSDS) Bi-Weekly Inspection

Description of Daily Activities and Events:

- TRC on-site.
- Checked in with front desk and custodian's office to sign in.
- All six SSDS suction fans were operating.
- See below for pressure gauge readings from for each suction fan installation.

  Building "D":
  - EF–4: 5.00 inches of water vacuum

  Building "C":
  - EF–3: 4.50 inches of water vacuum

  Building "B":
  - EF–2: 4.50 inches of water vacuum
  - EF–6: 5.00 inches of water vacuum

  Building "A":
  - EF–1: 4.50 inches of water vacuum
  - EF–5: 5.00 inches of water vacuum

- The Building Management System (BMS) is up and running.

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FIELD ACTIVITY DAILY LOG

Date: 5/24/13

Project Name: NYCSCA Mott Haven
LLW No.: 033485
IEH No.: 41747
TRC Project No.: 192455

Field Activity Subject: Sub-Slab Depressurization System (SSDS) Bi-Weekly Inspection

Description of Daily Activities and Events:

- TRC on-site.
- Checked in with front desk and custodian's office to sign in.
- All six SSDS suction fans were operating.
- See below for pressure gauge readings from for each suction fan installation.

  Building "D":
  - EF–4: 5.00 inches of water vacuum

  Building "C":
  - EF–3: 4.50 inches of water vacuum

  Building "B":
  - EF–2: 4.50 inches of water vacuum
  - EF–6: 4.25 inches of water vacuum

  Building "A":
  - EF–1: 4.75 inches of water vacuum
  - EF–5: 4.50 inches of water vacuum

- The Building Management System (BMS) is up and running.

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FIELD ACTIVITY DAILY LOG

Date: 06/05/13

Author: Sanjay Sharma

Attendees: Rob Rivera, Custodian

Project Name: NYCSCA Mott Haven
LLW No.: 033485
IEH No.: 41747
TRC Project No.: 192455

Field Activity Subject: Sub-Slab Depressurization System (SSDS) Bi-Weekly Inspection

Description of Daily Activities and Events:

- TRC on-site.
- Checked in with front desk and custodian's office to sign in.
- All six SSDS suction fans were operating.
- See below for pressure gauge readings from for each suction fan installation.

  Building "D":
  - EF–4: 5.00 inches of water vacuum

  Building "C":
  - EF–3: 4.50 inches of water vacuum

  Building "B":
  - EF–2: 4.50 inches of water vacuum
  - EF–6: 5.00 inches of water vacuum

  Building "A":
  - EF–1: 4.50 inches of water vacuum
  - EF–5: 4.75 inches of water vacuum

- The Building Management System (BMS) is up and running.

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FIELD ACTIVITY DAILY LOG

Date: 06/19/13

Author: Sanjay Sharma

Attendees: None

Project Name: NYCSCA Mott Haven
LLW No.: 033485
IEH No.: 41747
TRC Project No.: 192455

Field Activity Subject: Sub-Slab Depressurization System (SSDS) Bi-Weekly Inspection

Description of Daily Activities and Events:

- TRC on-site.
- Checked in with front desk and custodian's office to sign in.
- All six SSDS suction fans were operating.
- See below for pressure gauge readings from for each suction fan installation.

  Building "D":
  - EF–4: 5.00 inches of water vacuum

  Building "C":
  - EF–3: 4.50 inches of water vacuum

  Building "B":
  - EF–2: 4.25 inches of water vacuum
  - EF–6: 5.00 inches of water vacuum

  Building "A":
  - EF–1: 4.50 inches of water vacuum
  - EF–5: 4.75 inches of water vacuum

- The Building Management System (BMS) is up and running.

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FIELD ACTIVITY DAILY LOG

Date: 07/10/13

Author: Sanjay Sharma

Attendees: None

Project Name: NYCSCA Mott Haven
LLW No.: 033485
IEH No.: 41747
TRC Project No.: 192455

Field Activity Subject: Sub-Slab Depressurization System (SSDS) Bi-Weekly Inspection

Description of Daily Activities and Events:

- TRC on-site.
- Checked in with front desk and custodian's office to sign in.
- All six SSDS suction fans were operating.
- See below for pressure gauge readings from for each suction fan installation.
    - **Building "D":**
    - EF–4: 5.00 inches of water vacuum
    - **Building "C":**
    - EF–3: 4.50 inches of water vacuum
    - **Building "B":**
    - EF–2: 4.25 inches of water vacuum
    - EF–6: 5.00 inches of water vacuum
    - **Building "A":**
    - EF–1: 4.50 inches of water vacuum
    - EF–5: 4.75 inches of water vacuum
- BMS functionality could not be tested today, as the entire "online" system for BMS, RTUs etc. was down for repairs and/or maintenance. The Contractor (CTI) was working on it.

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FIELD ACTIVITY DAILY LOG

Date: 07/26/13

Author: Sanjay Sharma

Attendees: None

Project Name: NYCSCA Mott Haven
LLW No.: 033485
IEH No.: 41747
TRC Project No.: 192455

Field Activity Subject: Sub-Slab Depressurization System (SSDS) Bi-Weekly Inspection

Description of Daily Activities and Events:

- TRC on-site.
- Checked in with front desk and custodian's office to sign in.
- All six SSDS suction fans were operating.
- See below for pressure gauge readings from for each suction fan installation.
    - **Building "D":**
    - EF–4: 4.50 inches of water vacuum
    - **Building "C":**
    - EF–3: 4.50 inches of water vacuum
    - **Building "B":**
    - EF–2: 4.50 inches of water vacuum
    - EF–6: 5.25 inches of water vacuum
    - **Building "A":**
    - EF–1: 4.50 inches of water vacuum
    - EF–5: 4.75 inches of water vacuum
- The Building Management System (BMS) is up and running.

Attachment 4
Semiannual Groundwater Monitoring Reports

1430 Broadway
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August 12, 2013

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

Re: Certification of Groundwater Monitoring
Mott Haven Campus – X790
730 Concourse Village West
Bronx, New York 10451
SCA LLW# 033485, Job# 34857
NYSDEC BCP No. C203030

Dear Ms. Guterman:

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

- On March 28, 2013, TRC conducted semi-annual groundwater monitoring (12th event, 8th semi-annual event). A report summarizing the results was submitted to the NYSDEC on April 18, 2013, under separate cover.

Please do not hesitate to contact us at (212) 221-7822 if you have any questions.

Sincerely,
TRC Engineers, Inc.

David S. Glass, P.E.
NYS Professional Engineer License No. 068884

cc: C. Guder

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New York, NY 10018

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April 18, 2013

Ms. Sondra Martinkat
Environmental Engineer 2
New York State Department of Environmental Conservation (NYSDEC)
Division of Environmental Remediation, Region 2 Office
47-40 21st Street
Long Island City, New York 11101

Re: Semi-Annual Groundwater Monitoring
April 2013 (12th Event, 8th Semi-Annual Event)
Mott Haven Site
730 Concourse Village West
Bronx, New York 11375
SCA LLW# 033485/SCA Job #41747
BCP No. C203030

Dear Ms. Martinkat:

On behalf of the New York City School Construction Authority (NYCSCA), TRC Engineers,, Inc. (TRC) 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 Site Management Plan (SMP), approved by the New York State Department of Environmental Conservation (NYSDEC, the Department) on November 25, 2008. The groundwater monitoring data will be submitted via email to the NYSDEC in Electronic Data Deliverable (EDD) format for input into the Department's database.

On March 28, 2013 water levels were measured in the seven existing on-site monitoring wells. The depth to water measurements and corresponding groundwater elevations are summarized in Table 1. Groundwater contours based on measured groundwater elevations data are shown in Figure 2. The contours on Figure 2 indicate that the direction of horizontal groundwater flow is generally toward the southeast, consistent with data obtained during the remedial investigation and previous groundwater monitoring events.

On March 28, 2013 groundwater samples were collected from the seven existing on-site monitoring wells MW-3R, MW-5R, MW-11R, MW-23, MW-24, MW-25 and MW-26R as shown on Figure 1. 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.

Groundwater samples were submitted to York Analytical Laboratories, Inc. (York) of Stratford, Connecticut, a New York State Environmental Laboratory Accreditation Program (ELAP) certified laboratory for analysis for Target Compound List (TCL) volatile organic compounds (VOCs) plus methyl tert-butyl ether (MTBE) per the 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 sample, 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. The primary sample was non-detect for all compounds analyzed, however the duplicate sample exhibited an estimated concentration of cis-1,2-dichloroethene of 1.3 micrograms per liter (µg/L), which is below the NYSDEC Class GA groundwater quality standard of 5.0 µg/L. The detection of cis-1,2-dichloroethene in the duplicate sample, while absent in the primary sample, does not affect data usability. All other laboratory QC criteria (e.g., surrogate and spike recoveries) were acceptable. These results generally indicate acceptable precision in the laboratory analysis.

Two VOCs were detected in the groundwater sample from monitoring well MW-24. Tetrachloroethene (PCE) was detected at a concentration of 19 µg/L, which exceeded the NYSDEC Class GA groundwater standard (principal organic contaminant standard) of 5.0 µg/L. Trichloroethene (TCE) was detected at an estimated concentration of 1.3 µg/L, which is below the Class GA groundwater quality standard. In previous sampling events, PCE concentrations in groundwater from MW-24 have ranged from between 14 and 51 µg/L. Monitoring well MW-24 is located on the upgradient side of the Site, and the PCE and TCE detected in the groundwater sample from MW-24 are likely from upgradient sources.

Of the three downgradient monitoring wells, only one VOC was detected in the sample from well MW-3R. Cis-1,2-dichloroethene was detected at an estimated concentration of 1.1 µg/L, which is below the Class GA groundwater quality standard.

No other VOCs were detected at concentrations exceeding the laboratory method detection limits or the reporting limits.

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. VOCs in downgradient monitoring wells MW-3R, MW-5R and MW-11R were non-detect or below Class GA groundwater quality standards. Accordingly, the remedial objectives for groundwater continue to be met per the RAWP.

Please do not hesitate to contact me at (212) 221-7822 x103 if you have any questions or require additional information regarding this project.

Sincerely,

TRC Engineers, Inc.

Charles Guder
Senior Project Manager

cc: C. Bethoney, New York State Department of Health (NYSDOH)
L. Guterman, NYCSCA

Attachments:

Table 1 – Groundwater Monitoring Well Elevation Data
Table 2 – Summary of VOCs Detected in Groundwater

Figure 1 – Monitoring Well Location Plan
Figure 2 – Groundwater Surface Elevation Contour Plan

Appendix A – Field Sampling Logs and Notes
Appendix B – Laboratory Analytical Data Summary Package
Appendix C – Laboratory Certification Forms

August 12, 2013

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

Re: Certification of Groundwater Monitoring
Mott Haven Campus
730 Concourse Village West
Bronx, New York 10451
SCA LLW# 033485 / SCA Job# 41747
BCP No. C203030

Dear Ms. Guterman:

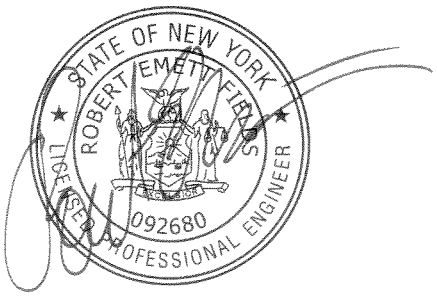
Pursuant to the New York State Department of Environmental Conservation (NYSDEC)-approved November 2008 Site Management Plan, this letter certifies that on June 15, 2013, STV conducted semi-annual groundwater monitoring (13th event, 9th semi-annual event). The Semi-Annual Groundwater Monitoring report was submitted to NYSDEC on July 15, 2013, under separate cover.

If you have any questions, please contact me at 212-614-3450.

Sincerely,

STV INCORPORATED

Robert E. Fields, P.E.
NYS Professional Engineer #092680



225 PARK AVENUE SOUTH
NEW YORK, NEW YORK 10003-1604
(212) 777-4400 FAX: (212) 529-5237

July 15, 2013

Ms. Sondra Martinkat
Environmental Engineer 2
New York State Department of Environmental Conservation (NYSDEC)
Division of Environmental Remediation, Region 2 Office
47-40 21st Street
Long Island City, New York 11101

Re: Semi-Annual Groundwater Monitoring
June 2013 (13th Event, 9th Semi-Annual Event)
Mott Haven Campus
730 Concourse Village West
Bronx, New York 11375
SCA LLW# 033485/SCA Job #41747
BCP No. C203030

Dear Ms. Martinkat:

On behalf of the New York City School Construction Authority (NYCSCA), STV Incorporated (STV) has prepared this semi-annual report regarding the post-remediation groundwater sampling at the Mott Haven Campus (i.e., the "Site). Groundwater monitoring results are being reported in accordance with the November 2008 Mott Haven Site Management Plan (SMP), approved by the New York State Department of Environmental Conservation (NYSDEC, the Department) on November 25, 2008. The groundwater monitoring data will be submitted via email to the NYSDEC in Electronic Data Deliverable (EDD) format for input into the Department's database.

On June 15, 2013, water levels were measured in the seven existing on-site monitoring wells. The depth to water measurements and corresponding groundwater elevations are summarized in Table 1. Groundwater contours based on measured groundwater elevation data are shown in Figure 2. The contours depicted on Figure 2 indicate that the direction of horizontal groundwater flow is generally toward the southeast, consistent with data obtained during the remedial investigation and previous groundwater monitoring events.

On June 15, 2013, groundwater samples were collected from the seven existing on-site monitoring wells MW-3R, MW-5R, MW-11R, MW-23, MW-24, MW-25, and MW-26R as shown on Figure 1. 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*.

Groundwater samples were submitted to York Analytical Laboratories, Inc. (York) of Stratford, Connecticut, a New York State Environmental Laboratory Accreditation Program (ELAP) certified laboratory for analysis for Target Compound List (TCL) volatile organic compounds (VOCs) plus methyl tert-butyl ether (MTBE) per the United States Environmental Protection Agency (USEPA) Method 8260. Table 2 summarizes the groundwater analytical data. The laboratory report for the groundwater sample analysis is provided in *Appendix B,* and *Appendix C* contains the laboratory certification forms.

Methylene chloride was detected in all of the samples analyzed, including the trip blank. Methylene chloride was detected in the groundwater samples at concentrations ranging from 25 to 31 micrograms per liter (µg/L). A similar concentration of methylene chloride (24 µg/L) was detected in the trip blank

(which are sealed vials of analyte-free water prepared by the laboratory and shipped, unopened, to and from the field, with the groundwater sample vials). Previous sampling events have not indicated detections of methylene chloride in groundwater samples or the accompanying trip blanks. The detection of methylene chloride in the trip blank during this sampling event could indicate the introduction of this VOC during shipping (although there was no presence of this constituent) or, more likely, from laboratory sources of contamination. The detection of methylene chloride is not associated with groundwater contamination at the site.

The field duplicate sample was collected from MW-5R. The primary sample exhibited tetrachloroethene (PCE) at an estimated concentration of 2.2 µg/L and acetone at an estimated concentration of 7.7 µg/L, both of which are below their respective NYSDEC Class GA groundwater quality standards of 5.0 µg/L and 50 µg/L. The duplicate sample exhibited a very similar detection of PCE at an estimated concentration of 2.3 µg/L. Acetone was not detected in the duplicate sample. With the exception of methylene chloride (which as described above was present in all samples) there were no other VOC detections in MW-5R or the duplicate. These results indicate good precision in the laboratory analyses. All other laboratory QC criteria (e.g., surrogate and spike recoveries) were acceptable.

The laboratory analytical results reported only one VOC detected in one groundwater sample at a concentration greater than the NYSDEC Class GA Values. PCE was detected in monitoring well MW-24 at a concentration of 7.3 µg/L, which slightly exceeded the NYSDEC Class GA groundwater standard (principal organic contaminant standard) of 5.0 µg/L. In previous sampling events, PCE concentrations in groundwater samples collected from MW-24 have ranged between non-detect and 51 µg/L. In addition to PCE, naphthalene, and MTBE were detected in the groundwater sample collected from monitoring well MW-24 both at estimated concentrations of 1.2 µg/L. Monitoring well MW-24 is located on the upgradient side of the Site, and the VOCs detected in the groundwater sample collected from MW-24 are likely from an upgradient source.

Four (4) VOCs were detected in the groundwater sample collected from monitoring well MW-23. Vinyl chloride, PCE, cis 1,2-dichloroethene, and acetone were detected at estimated concentrations of 1.4 µg/L, 2.3 µg/L, 1.4 µg/L, and 6.6 µg/L, below their respective Class GA Values of 5.0 µg/L, 5.0 µg/L, 2.0 µg/L, and 50 µg/L.

Two (2) VOCs were detected in the groundwater sample collected from monitoring well MW-26R. Naphthalene and PCE were detected at estimated concentrations of 8.3 µg/L and 4.0 µg/L, below their respective Class GA Values of 10.0 µg/L, and 5.0 µg/L.

One (1) VOC was detected in the groundwater sample collected from monitoring well MW-25. PCE was detected at estimated concentrations of 2.2 µg/L, below the Class GA Value of 5.0 µg/L.

Samples analyzed from the three downgradient monitoring wells, MW-3R. MW-5R, and MW-11R, reported estimated concentrations of PCE ranging between 1.4 µg/L and 3.6 µg/L, all below the Class GA Value of 5.0 µg/L. Cis-1,2-dichloroethene was also detected at an estimated concentration of 1.3 µg/L in MW-3R, which is below the Class GA Value of 5.0 µg/L. As described above, acetone was detected at an estimated concentration of 7.7 µg/L in MW-5R, which is below the Class GA Value of 50 µg/L.

No other VOCs were detected in groundwater at concentrations exceeding the laboratory method detection limits or the reporting limits.

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. VOCs in downgradient monitoring wells MW-3R, MW-5R and MW-11R were non-detect or below Class GA groundwater quality standards. Accordingly, the remedial objectives for groundwater continue to be met per the RAWP.

Please do not hesitate to contact me at (914) 400-5205 if you have any questions or require additional information regarding this project.

Sincerely,

STV Incorporated

Michael R. Sherwood, CPG
Senior Consultant

cc: C. Bethoney, New York State Department of Health (NYSDOH)
L. Guterman, NYCSCA

Attachments:

Table 1 – Groundwater Monitoring Well Elevation Data
Table 2 – Summary of Target Compound List VOCs Detected in Groundwater

Figure 1 – Monitoring Well Sample Location Plan
Figure 2 – Groundwater Surface Elevation Contour Plan

Appendix A – Field Sampling Logs
Appendix B – Laboratory Analytical Data Summary Package
Appendix C – Laboratory Certification Forms

Attachment 5
Photographic Documentation

Photo 1: View of BMS on typical SSDS fan unit (EF-4).

Photo 2: View of spare SSDS fan unit (EF-7) in Room B80.

Photo 3: View of typical SSDS roof fan unit (EF-4).

Photo 4: View of typical vacuum gauge associated with SSDS fan units (EF-4).

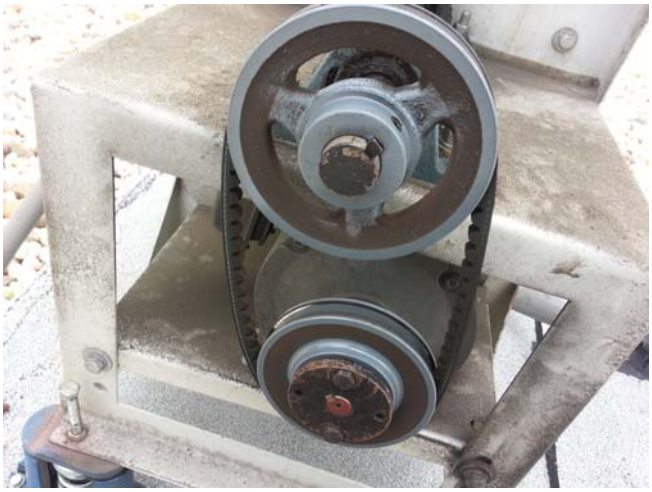


Photo 5: View of typical SSDS fan belt (EF-5).

Photo 6: View of typical bare floor in Stairwell H.

Photo 7: View of typical bare concrete floor in Room C59.

Photo 8: View of typical sidewalk pavers.

Photo 9: View of artificial turf on football field.

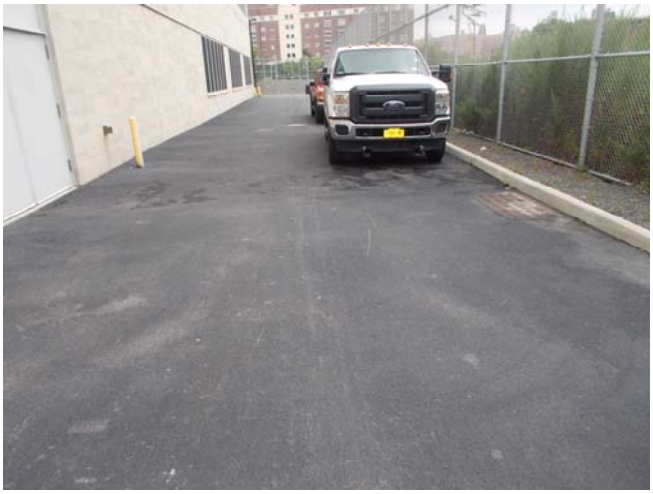


Photo 10: View of typical asphalt cover.

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: 8/8/13
Inspection Time: 10AM
Weather Conditions: Clear
Air Temperature (°F): 85°F
Comments:

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. tight except EF-1 (one wire) & EF-5 (all three wires)
* Inspect fan mounting and vibration isolators. ✓
* Inspect condition of fan belt. ✓
* Inspect alignment of fan belt. ✓
* Record vacuum gauge reading. ≈ -5"
* Inspect bolts and set screws for tightness and rusty condition. ✓
* Verify spare fan is available, properly lubricated, and properly stored. Yes, Room 880
* 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? Yes
* 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? Inaccessible
* 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? See comments.
* 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: Concrete cracks around two manhole covers in concrete cap located under PS 156 & IS 151. Notified NYCDOE and will be repaired.

E. VAPOR BARRIER INSPECTION

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

* Review all cracks or other openings indentified in ground floors during previous inspections. ✓
* 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:

Concrete cracks which were observed around manhole covers located on the concrete cap were repaired on Sept. 4th and visually verified by AJC on Sept. 5th

Inspector's Signature: _____

Attachment 7
Training Acknowledgement

Cardno ATC
Shaping the Future

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

Annual Training Acknowledgement
Engineering Controls Operation and Maintenance

Location: X790

Custodian/Fireman: Robert Rivera JR

I, Robert Rivera JR, received annual refresher training on Engineering Controls Operation and Maintenance by Cardno ATC on 8/8/13. As part of the annual refresher training I conducted a walkthrough with Cardno ATC 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: Robert Rivera JR **Date:** 8/8/13
Custodian/Fireman

Recommendations:

- ~~Commission~~ GG the BMS is fully commissioned
- Repair concrete caulks around manhole covers in concrete curbs located under PS 156 & PS 151 at the following two locations:
  - Columns 40-41 E
  - Columns 196 & 193