

Advanced Cleanup Technologies, Inc.

ENVIRONMENTAL CONSULTANTS

February 5, 2014

New York City Office of Environmental Remediation
City Voluntary Cleanup Program
c/o Shaminder Chawla
100 Gold Street, 2nd Floor
New York, NY 10038

Re: 14CVCP178K
573 4th Avenue
Remedial Action Work Plan (RAWP) Stipulation List

Dear Mr. Chawla:

Advanced Cleanup Technologies (ACT) hereby submits a Remedial Action Work Plan (RAWP) Stipulation List for the subject site to the New York City Office of Environmental Remediation (NYCOER) on behalf of New Empire Builder Corp. This letter serves as an addendum to the RAWP to stipulate additional content, requirements and procedures that will be followed during the site remediation. The contents of this list are added to the RAWP and will supersede the content in said document where there is a conflict in purpose or intent. The additional requirements/procedures include the following:

1. The criterion attached in **Appendix 1** will be utilized if additional petroleum containing tank or vessel is identified during the remedial action or subsequent redevelopment excavation activities. All petroleum spills will be reported to the NYSDEC hotline as required by applicable laws and regulations. This contingency plan is designed for heating oil tanks and other small or moderately sized storage vessels. If larger tanks, such as gasoline storage tanks are identified, OER will be notified before this criterion is utilized.
2. A pre-construction meeting is required prior to start of remedial excavation work at the site. A pre-construction meeting will be held at the site and will be attended by OER, the developer or developer representative, the consultant, excavation/general contractor, and if applicable, the soil broker.



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3. A pre-approval letter from all disposal facilities will be provided to OER prior to any soil/fill material removal from the site. Documentation specified in the RAWP - Appendix 3 - Section 1.6 "Materials Disposal Off-Site" will be provided to OER. If a different disposal facility for the soil/fill material is selected, OER will be notified immediately.
4. A CD containing the final RAWP including this approved Stipulation List will be placed in the library that constitutes the primary public repository for project documents.
5. Signage for the project will include a sturdy placard mounted in a publically accessible right of way to building and other permits signage will consist of the NYC VCP Information Sheet (attached **Appendix 2**) announcing the remedial action. The Information sheet will be laminated and permanently affixed to the placard.
6. In the event that hazardous waste is identified during the remedial action or subsequent redevelopment excavation activities at this NYC VCP project, and removal and transportation of hazardous waste becomes necessary, the project may be subject to the New York State Department of Environmental Conservation's Special Assessment Tax (ECL 27-0923) and Hazardous Waste Regulatory Fees (ECL 72-00402). See DEC's website for more information: <http://www.dec.ny.gov/chemical/9099.html>.
7. Any hotspot areas identified during waste characterization sampling will be disposed of in accordance with applicable laws and regulations as well as disposal facility requirements. Waste characterization sampling results will be provided to OER.
8. **Appendix 3** includes Vapor Barrier Pre-Certification letter from Vapor Barrier manufacturer stating that the proposed vapor barrier system mitigates against and is compatible with the contaminants of concern at the site.
9. OER requires parties seeking City Brownfield Incentive Grants to carry insurance. For a cleanup grant, both the excavator and the trucking firm(s) that handle removal of soil must carry or be covered under a commercial general liability (CGL) policy that provides \$1 million per claim in coverage. OER recommends that excavators and truckers also carry contractors pollution liability (CPL) coverage, also providing \$1 million per claim in coverage. The CGL policy, and the CPL policy if obtained, must name the City of New York, the NYC Economic Development Corporation, and Brownfield Redevelopment Solutions as additional insured. For an investigation grant, an environmental consultant must be a qualified vendor in the BIG program and carry \$1 million of professional liability (PL) coverage. A fact sheet regarding insurance is attached as **Appendix 4**.



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10. Daily report will be provided during active excavation work. If no work is performed for extended time period, daily report frequency will be reduced to weekly basis. Daily report template is attached in **Appendix 5**.
- 11 Approval for the import of material for backfilling purposes, including the material that will be used for the permeable layer of the SSDS, must be received from OER prior to the commencement of such activities. Documentation illustrating that the requisitioned import material has been properly segregated, stockpiled, and tested (when needed) prior to its release from the generating site, and by extension prior to its arrival to the import site, will be required. Blended recycled concrete aggregate (BRCA) is not an acceptable material for import.
- 12 The following architectural and engineering plans signed and stamped by the PE or RA of record for the project are attached as **Appendix 6**:
 - a. final cover slab design including plan view and detailed cross-section; and
 - b. vapor barrier design (cross-section and plan showing horizontal extent, details of penetrations, joints, seams, etc.)A manufacturer compatibility letter is also included (**Appendix 3**) confirming the compatibility of the vapor barrier material with soil gas contaminants identified onsite.
- 13 Truck route is included in **Appendix 7**.
- 14 The signed RIR certification page and stamped/signed RAWP certification page (with QEP and P.E. certification) is included in **Appendix 8**.

Sincerely,

Paul P. Stewart, MS, JD
President

Cc: Zach Schreiber, NYCOER

Appendix 1
Generic Procedures for Management of Underground Storage Tanks
Identified under the NYC VCP

Prior to Tank removal, the following procedures should be followed:

- Remove all fluid to its lowest draw-off point.
- Drain and flush piping into the tank.
- Vacuum out the “tank bottom” consisting of water product and sludge.
- Dig down to the top of the tank and expose the upper half.
- Remove the fill tube and disconnect the fill, gauge, product, vent lines and pumps. Cap and plug open ends of lines.
- Temporarily plug all tank openings, complete the excavation, remove the tank and place it in a secure location.
- Render the tank safe and check the tank atmosphere to ensure that petroleum vapors have been satisfactorily purged from the tank.
- Clean tank or remove to storage yard for cleaning.
- If the tank is to be moved, it must be transported by licensed waste transporter. Plug and cap all holes prior to transport leaving a 1/8 inch vent hole located at the top of the tank during transport.
- After cleaning, the tank must be made acceptable for disposal at a scrap yard, cleaning the tanks interior with a high pressure rinse and cutting the tank in several pieces.

During the tank and pipe line removal, the following field observations should be made and recorded:

- A description and photographic documentation of the tank and pipe line condition (pitting, holes, staining, leak points, evidence of repairs, etc.).
- Examination of the excavation floor and sidewalls for physical evidence of contamination (odor, staining, sheen, etc.).
- Periodic field screening (through bucket return) of the floor and sidewalls of the excavation, with a calibrated photoionization detector (PID).

Impacted Soil Excavation Methods

The excavation of the impacted soil will be performed following the removal of the existing tanks. Soil excavation will be performed in accordance with the procedures described under Section 5.5 of Draft DER-10 as follows:

- A description and photographic documentation of the excavation.
- Examination of the excavation floor and sidewalls for physical evidence of contamination (odor, staining, sheen, etc.).
- Periodic field screening (through bucket return) of the floor and sidewalls of the excavation, with calibrated photoionization detector (PID).

Final excavation depth, length, and width will be determined in the field, and will depend on the horizontal and vertical extent of contaminated soils as indentified through physical examination (PID response, odor, staining, etc.). Collection of verification samples will be performed to evaluate the success of the removal action as specified in this document.

The following procedure will be used for the excavation of impacted soil (as necessary and appropriate):

- Wear appropriate health and safety equipment as outlined in the Health and Safety Plan.

- Prior to excavation, ensure that the area is clear of utility lines or other obstructions. Lay plastic sheeting on the ground next to the area to be excavated.
- Using a rubber-tired backhoe or track mounted excavator, remove overburden soils and stockpile, or dispose of, separate from the impacted soil.
- If additional UST's are discovered, the NYSDEC will be notified and the best course of action to remove the structure should be determined in the field. This may involve the continued trenching around the perimeter to minimize its disturbance.
- If physically contaminated soil is present (e.g., staining, odors, sheen, PID response, etc.) an attempt will be made to remove it, to the extent not limited by the site boundaries or the bedrock surface. If possible, physically impacted soil will be removed using the backhoe or excavator, segregated from clean soils and overburden, and staged on separated dedicated plastic sheeting or live loaded into trucks from the disposal facility. Removal of the impacted soils will continue until visibly clean material is encountered and monitoring instruments indicate that no contaminants are present.
- Excavated soils which are temporarily stockpiled on-site will be covered with tarp material while disposal options are determined. Tarp will be checked on a daily basis and replaced, repaired or adjusted as needed to provide full coverage. The sheeting will be shaped and secured in such a manner as to drain runoff and direct it toward the interior of the property.

Once the site representative and regulatory personnel are satisfied with the removal effort, verification of confirmatory samples will be collected from the excavation in accordance with DER-10.

Appendix 2
NYC VCP Signage



NYC Voluntary Cleanup Program

573 4th Avenue
Site #: 14CVCP178K

This property is enrolled in the New York City Voluntary Cleanup Program for environmental remediation. This is a voluntary program administered by the NYC Office of Environmental Remediation.

Or scan with smart phone:



For more information,
log on to: www.nyc.gov/oer

If you have questions or would like more information,
please contact:

Shaminder Chawla at (212) 442-3007
or email us at brownfields@cityhall.nyc.gov

Appendix 3
Vapor Barrier Pre-Certification letter



December 27, 2013

Paul Stewart
Advanced Cleanup Technologies, Inc.
960 South Broadway, Suite 100
Hicksville, NY 11801

Dear Mr. Stewart:

I have reviewed the Remedial Investigation Report (Advanced Cleanup Technologies, October 2013) for the remediation/construction project located at 573 4th Ave, Brooklyn, NY and noted the contaminants specifically described on the following pages:

- Table 1—VOCs, SVOCs, Metals, PCBs and Pesticides in Soil
- Table 2—VOCs in Sub-Slab Vapor

The identified contaminants at the levels reported will not have an adverse effect on the intended performance of VaporBlock Plus VBP20 as a vapor barrier, provided standard design and application procedures are followed. Standard installation instructions and details can be found on our website at www.ravenefd.com.

If you have any questions, please feel free to call or send an e-mail.

Sincerely,

A handwritten signature in cursive script that reads "Erika Arens".

Erika Arens
Product Development Specialist
Engineered Films Division
Raven Industries, Inc.
(605) 357-0453
Erika.Arens@ravenind.com

Appendix 4
BIG Program Insurance Fact Sheet

FACT SHEET – BIG PROGRAM INSURANCE REQUIREMENTS

Investigation Grants – for a developer or site owner to be eligible for a BIG investigation grant, its environmental consultant(s) must be:

- a Qualified Vendor in the BIG Program; and
- maintain Professional Liability (PL) insurance of \$1M per claim and annual aggregate.

Cleanup Grants – for a developer or site owner to be eligible for a BIG cleanup grant:

- Its general contractor or excavation/foundation contractor hired to perform remedial work must maintain Commercial General Liability (CGL) insurance of at least \$1M per occurrence and \$2M in the general aggregate. It is recommended that the general contractor or excavation/foundation contractor also maintain a Contractors Pollution Liability policy (CPL) of at least \$1M per occurrence.
- Its subcontractors who are hired by the general contractor etc. to perform remedial work at a site, including soil brokers and truckers, must also maintain a CGL policy in the amount and with the terms set forth above. It is recommended that subcontractors also maintain a CPL policy in the amount and with the terms set forth above.

The CGL policy, and the CPL policy if in force, must list the city, EDC and BRS as additional insureds, include completed operations coverage and be primary and non-contributory to any other insurance the additional insureds may have.

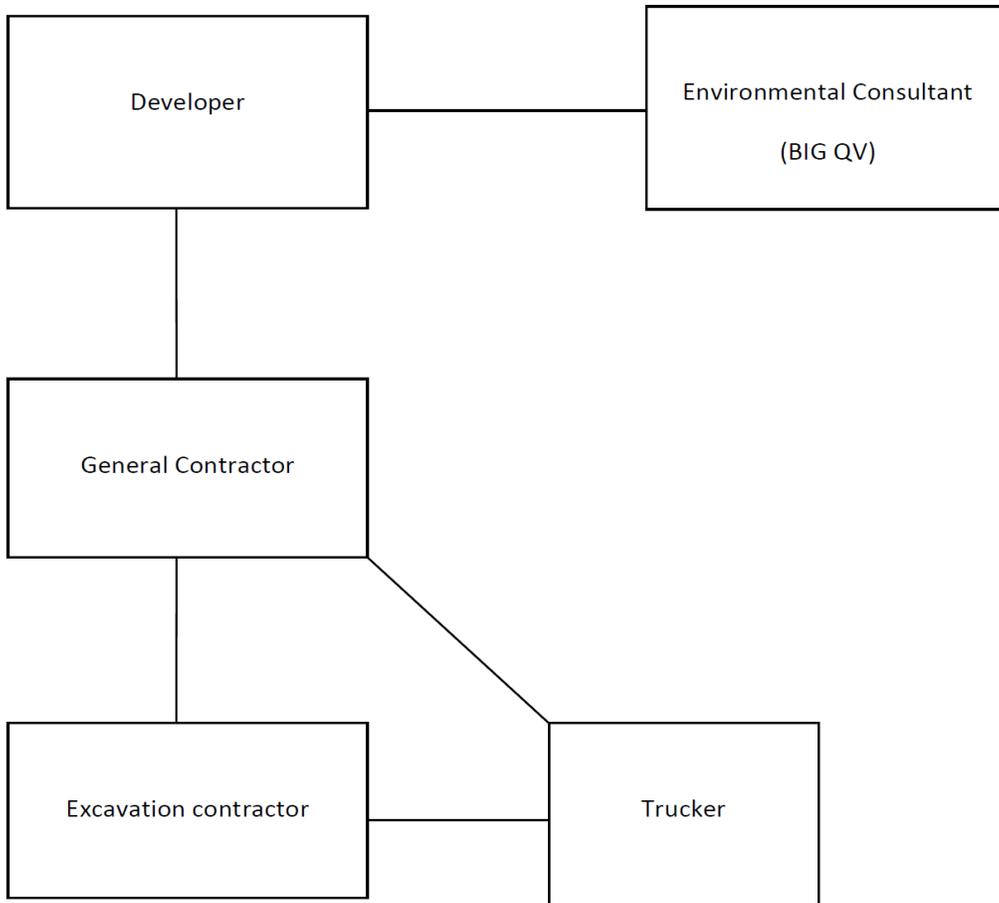
- Its environmental consultant(s) hired to oversee the cleanup must be:
 - a. a BIG Qualified Vendor; and
 - b. maintain Professional Liability (PL) insurance of \$1M per claim and annual aggregate.

If, in the alternative, the developer hires its environmental consultant to perform the cleanup, the environmental consultant must maintain CGL insurance in the amount and with the terms set forth above. It is recommended that the environmental consultant also maintain CPL coverage in the amount and with the terms set forth in the first two bulleted items listed above.

A schematic presenting the contractual relationships described above appears on page 2. Parties who must be named as Additional Insureds on Cleanup Grant insurance policies (CGL and CPL) are presented on page 3.

Example of Contractual Relationships for Cleanup Work

The Office of Environmental Remediation’s Voluntary Cleanup Plan program requires applicants to identify the parties who are engaged in active remediation of their sites including: the General Contractor hired to remediate and/or the excavation contractor hired to excavate soil from the site and the trucking firm(s) that remove soil from the site for disposal at approved facilit(ies).



The chart above shows contractual relationships that typically exist for projects that are enrolled in the Voluntary Cleanup Program.



NYC Office of Environmental
Remediation



BIG Program Additional Insureds

The full names and addresses of the additional insureds required under the Required CGL Policy and recommended CPL Policy are as follows:

“City and its officials and employees”

New York City Mayor’s Office of Environmental Remediation
253 Broadway, 14th Floor
New York, NY 10007

“NYC EDC and its officials and employees”

New York City Economic Development Corporation
110 William Street
New York, NY 10038

“BIG Grant Administrator and its officials and employees”

Brownfield Redevelopment Solutions, Inc.
739 Stokes Road, Units A & B
Medford, NJ 08055

Appendix 5
Daily Report Template

Generic Template for Daily Status Report

Instructions

The Daily Status Report submitted to OER should adhere to the following conventions:

- Remove this cover sheet prior to editing.
- Remove all the **red text** and replace with site-specific information.
- Submit the final version as a Word or PDF file.

Daily Status Reports

Daily status reports providing a general summary of activities for each day of *active remedial work* will be emailed to the OER Project Manager by the end of the following day. Those reports will include:

- Project number and statement of the activities and an update of progress made and locations of work performed;
- Quantities of material imported and exported from the Site;
- Status of on-Site soil/fill stockpiles;
- A summary of all citizen complaints, with relevant details (basis of complaint; actions taken; etc.);
- A summary of CAMP excursions, if any;
- Photograph of notable Site conditions and activities.

The frequency of the reporting period may be revised in consultation with OER project manager based on planned project tasks. Daily email reports are not intended to be the primary mode of communication for notification to OER of emergencies (accidents, spills), requests for changes to the RAWP or other sensitive or time critical information. However, such information will be included in the daily reports. Emergency conditions and changes to the RAWP will be communicated directly to the OER project manager by personal communication. Daily reports will be included as an Appendix in the Remedial Action Report.

DAILY STATUS REPORT

WEATHER	Snow		Rain		Overcast		Partly Cloudy	X	Bright Sun	
TEMP.	< 32		32-50		50-70	X	70-85		>85	

Prepared By: Enter Your Name Here

VCP Project No.:	13CVCP000M	E-Number:	13EHAN000M	Date:	01/01/2013
Project Name:	Name or Address				

Consultant: Person(s) Name and Company Name	Safety Officer: Person(s) Name and Company Name
General Contractor: Person(s) Name and Company Name	Site Manager/ Supervisor: Person(s) Name and Company Name

Work Activities Performed (Since Last Report):
Provide details about the work activities performed.

Working In Grid #: A1, B1, C1

Samples Collected (Since Last Report):
No samples collected or provide details

Air Monitoring (Since Last Report):
No air monitoring performed or provide details

Problems Encountered:
No problems encountered or provide details

Planned Activities for the Next Day/ Week:
Provide details about the work activities planned for the next day/ week.

									Example:	
Facility # Name/ Location Type of Waste Solid <u>Or</u> Liquid	Facility # Name Location Type of Waste Solid <u>Or</u> Liquid		##### Clean Earth Carteret, NJ petroleum soils Solid							
(Trucks, Cu.Yds. <u>Or</u> Gallons)	Trucks	Cu. Yds. <u>Or</u> Gallons	Trucks	Cu. Yds.						
Today									5	120
Total									25	600

NYC Clean Soil Bank		Receiving Facility: Name/ Address (Approved by OER)			
Tracking No.:	13CCSB000				
Today	Trucks 5	Cu. Yds. 25	Total	Trucks 120	Cu. Yds. 600

Site Grid Map
 Insert the site grid map here

Photo Log

Photo 1 – provide a caption

Insert Photo Here – Photo of the entire site

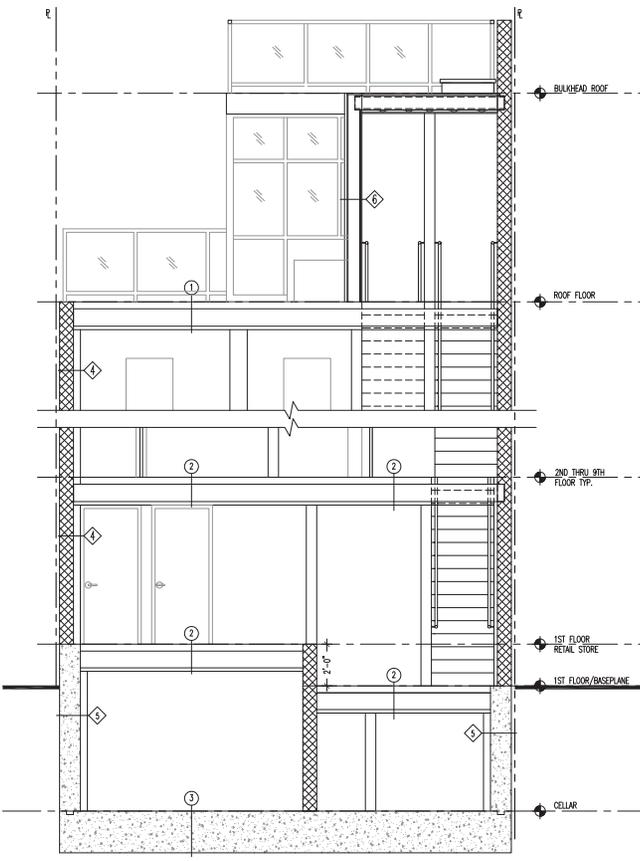
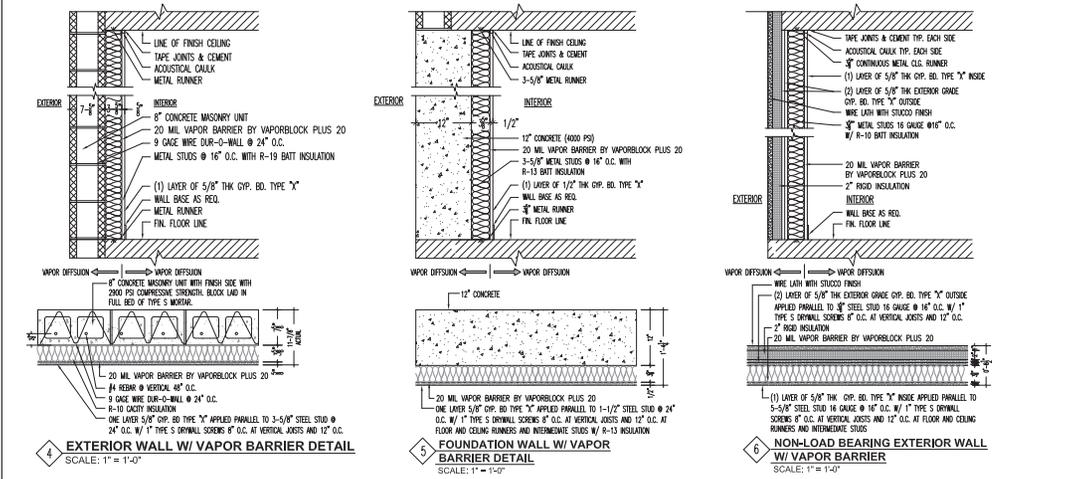
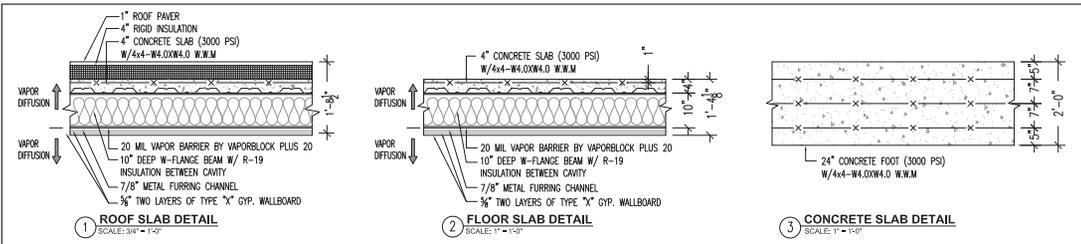
Photo 2 – provide a caption

Insert Photo Here – Photo of the work activities performed

Photo 3 – provide a caption

Insert Photo Here – Photo of the work activities performed

Appendix 6
Engineering Plans
(Final Cover Slab Design & Vapor Barrier Design)



BUILDING CONSULTING ENGINEERING PLLC
4916 3rd Avenue, Brooklyn, NY 11220
Tel: (718) 439-8588 Fax: (347) 799-1668
info@bceng.com www.bceng.com

DATE: 08/20/2018

DESIGNER: [Signature]

CLIENT: CPCO MANAGEMENT LLC
WILHE ZHAO
4920 3RD AVENUE
BROOKLYN, NEW YORK 11220
TEL: (718) 439-4668

REV. NO.	DATE	DESCRIPTION
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PROJECT: **573 4TH AVENUE**
BROOKLYN, NEW YORK 11215

COVER SLAB DETAIL
WALL DETAIL W/ VAPOR BARRIER
VAPOR BARRIER SPECIFICATION
CROSS BUILDING SECTION

DATE: 08/20/2018
PROJECT NO: 18-0001
DRAWN BY: [Signature]
CHECK BY: [Signature]
SCALE: A-100.00
FILE: 573 4TH AVENUE
SHEET: 14 OF 19
JOB NO: 18-0001

VAPORBLOCK® PLUS™ VBP20
Linear Vapor Barrier / Gas Barrier

Product Description
VaporBlock® Plus™ 20 is a multi-layer cross-laminated barrier made from state-of-the-art polyethylene and 3DPP foams to provide unparalleled performance in a wide range of applications. VaporBlock® Plus™ 20 is a highly advanced multi-layer barrier that provides superior performance in a wide range of applications. VaporBlock® Plus™ 20 is a highly advanced multi-layer barrier that provides superior performance in a wide range of applications.

Product Use
VaporBlock® Plus™ 20 is used in a wide range of applications, including residential and commercial buildings, and is designed to provide superior performance in a wide range of applications.

Applications
Basement Wall Vapor Barrier
Foundation Wall Vapor Barrier
Roof Slab Vapor Barrier

Spec & Packaging
VaporBlock® Plus™ 20 is available in 12' x 156" rolls to maximize coverage. All rolls are labeled on heavy-duty rolls for ease in handling and installation. Please contact us with factory-direct prices are available based on minimum volume requirements. Installation instructions and MSDS are available upon request.

ISO 9001:2008

VAPORBLOCK® PLUS™ VBP20
Linear Vapor Barrier / Gas Barrier

PROPERTIES	TEST METHOD	VAPORBLOCK PLUS 20	
		IMPERIAL	METRIC
Appearance		White/Gold	
Thickness, Nominal		20 mil	0.51 mm
Weight		102 lbs/MSF	498 g/m ²
Classification	ASTM E 1745	CLASS A, B & C	
Tensile Strength (min.) (MIL)	ASTM E 154 Section 9 (8-02)	50 lbf	102 N
Impact Resistance	ASTM D 1709	2600 g	
Maximum Use Temperature		180° F	82° C
Minimum Use Temperature		-70° F	-57° C
Permeance (Water Vapor)	ASTM E 154 Section 7	0.0008 Perm	0.0054 Perm
Permeance (Air)	ASTM E 96 Procedure B	0.0008 Perm	0.0054 Perm
Permeance (Gas)	ASTM E 154 Section 8, E96 Section 1, E96 Section 12, E96 Section 13, E96	0.00079	0.0052
Permeance (Water Vapor)	ASTM E 96 Procedure B	0.00079	0.0052
Permeance (Air)	ASTM E 96 Procedure B	0.00079	0.0052
Permeance (Gas)	ASTM E 96 Procedure B	0.00079	0.0052
Water Vapor Permeance	K1246295	< 1.3 x 10 ⁻¹⁰	
Water Vapor Permeance	ASTM D 1434	0.32 GTR (20% Transmission Rate)	0.00079

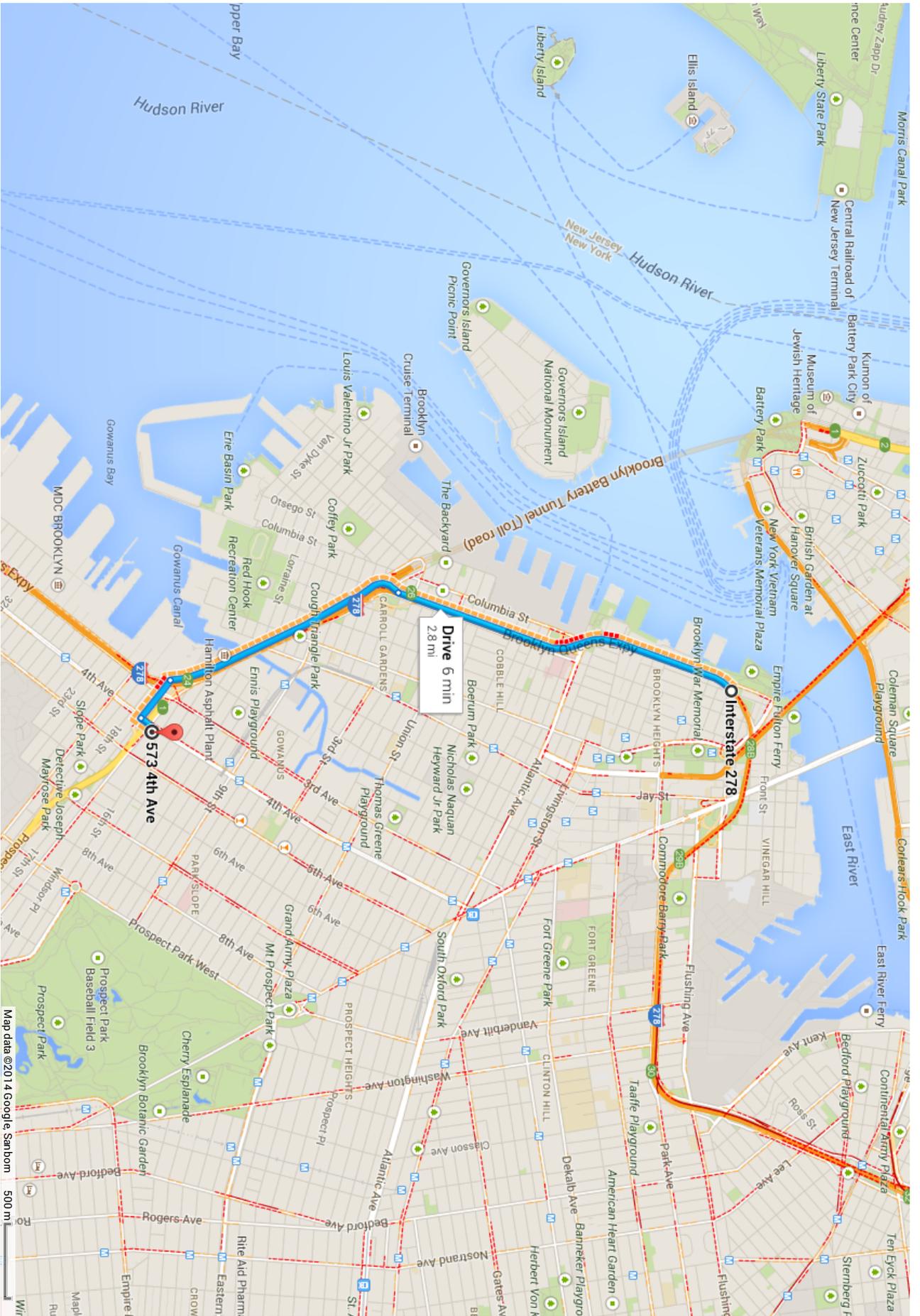
VaporBlock® Plus™ Placement
All applications are subject to structural design and shall be installed as follows. VaporBlock® Plus™ 20 shall be installed in accordance with the manufacturer's instructions and shall be installed in accordance with the manufacturer's instructions.

VaporBlock® Plus™
VaporBlock® Plus™ is a multi-layer cross-laminated barrier made using high quality polyethylene and 3DPP foams to provide unparalleled performance in a wide range of applications.

ISO 9001:2008

7 VAPOR BARRIER SPECIFICATION
SCALE: N.T.S.

Appendix 7
Truck Route



Drive 6 min
2.8 mi

573 4th Ave

Interstate 278



Truck loading and off loading areas

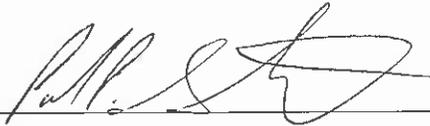
4th Ave © 2013 Google

Appendix 8

RIR and RAWP Certification Page

CERTIFICATION

I, Paul P. Stewart, am a Qualified Environmental Professional, as defined in RCNY § 43-1402(ar). I have primary direct responsibility for implementation of the Remedial Investigation for the 573 47th Avenue. (NYC VCP Site: 13EH-N282K). I am responsible for the content of this Remedial Investigation Report (RIR), have reviewed its contents and certify that this RIR is accurate to the best of my knowledge and contains all available environmental information and data regarding the property.

 8/8/2013 

Qualified Environmental Professional Date Signature

CERTIFICATION

I, Andrew L. Levenbaum, am a Professional Engineer licensed in the State of New York. I have primary direct responsibility for implementation of the remedial action for the 573 4th Avenue Site 13EH-N282K.

I, Paul P. Stewart am a Qualified Environmental Professional as defined in §43-140. I have primary direct responsibility for implementation of the remedial action for the 573 4th Avenue Site 13E11-N282K.

I certify that this Remedial Action Work Plan (RAWP) has a plan for handling, transport and disposal of soil, fill, fluids and other materials removed from the property in accordance with applicable City, State and Federal laws and regulations. Importation of all soil, fill and other material from off-Site will be in accordance with all applicable City, State and Federal laws and requirements. This RAWP has provisions to control nuisances during the remediation and all invasive work, including dust and odor suppression.

ANDREW R. LEVENBAUM

Name

053854

NYS PE License Number

Signature

Date

QEP Name

QEP Signature

Date

