

CONSTRUCTION COMPLETION REPORT

Former Nu Brite Cleaners

1299 1st Avenue

New York, New York 10021

NYSDEC BCP Number: C231072

Prepared for
3SK Corporation
27-15 27th Street
Astoria, NY 11102

Prepared by
integral
engineering p.c.

61 Broadway
Suite 1601
New York, NY 10006

September 26, 2016

Revised: September 29, 2016

Affiliated with Integral Consulting Inc.

CERTIFICATION

I, Keith P. Brodock, PE, am currently a registered professional engineer licensed by the State of New York, I had primary direct responsibility for implementation of the remedial program activities, and I certify that the Soil Vapor Intrusion Mitigation Work Plan Letter was implemented and that all construction activities were completed in substantial conformance with the Department-approved Soil Vapor Intrusion Mitigation Work Plan Letter.

I certify that all the information and statements in this certification form 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, Keith P. Brodock, PE, of Integral Engineering, P.C., am certifying as Owner's designated Site Representative for this site.



089004

NYS Professional Engineer #

9/29/2016

Date

Signature

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Table 1. SSDS Differential Pressure Measurements

ACRONYMS AND ABBREVIATIONS

3SK	3SK Corporation
AGV	Air Guideline Value
BCA	Brownfield Cleanup Agreement
CPP	Citizen Participation Plan
CCR	Construction Completion Report
EC	Engineering Control
HASP	Site Specific Health & Safety Plan
Hydro Tech	Hydro Tech Environmental Corp.
in WC	Inches of Water Column
Integral	Integral Engineering, P.C.
IRM	interim remedial measure
NYSDEC	New York State Department of Environmental Conservation
NYSDOH	New York State Department of Health
OSHA	Occupational Safety and Health Administration
PCE	tetrachloroethene
PVC	polyvinyl chloride
RAWP	Remedial Action Work Plan
RCRA	Resources Conservation and Recovery Act
RI	Remedial Investigation
SMP	site management plan
SSDS	sub-slab depressurization system
SVI	soil vapor intrusion
TCE	trichloroethylene
VMP	vacuum monitoring point
Work Plan	Soil Vapor Intrusion Mitigation Work Plan Letter

1 BACKGROUND AND SITE DESCRIPTION

Integral Engineering, P.C. (Integral) is pleased to present this Construction Completion Report on behalf of 3SK Corporation (3SK) that details the Interim Remedial Measures (IRMs) installed at 1299 1st Avenue, Manhattan, NY (the property). 3SK entered into a Brownfield Cleanup Agreement (BCA) with the New York State Department of Environmental Conservation (NYSDEC) on August 30, 2013, to investigate and remediate an approximately 1,957 square foot property located in the Upper East Side section of the Borough of Manhattan, New York. Remediation is ongoing at the property; this CCR covers the IRMs put in place at the property to protect against human health.

The site is located in the County of New York, New York and is identified as Block 1444 and Lot 30 on New York City tax maps. The site is situated on an approximately 0.045 acre area bounded by 70th Street to the north, 69th Street to the south, 1st Avenue to the east, and 2nd Avenue to the west (see Figure 1). The boundaries of the site are fully described in Appendix A: Metes and Bounds.

1.1 ENVIRONMENTAL SITE HISTORY

According to a record review conducted by Hydro Tech Environmental Corp. (Hydro Tech) of Commack, New York, historical Sanborn Maps indicated that the Site was used as an auto body repair shop from 1927 to 1942 and as a dry cleaner between 1976 and 1996. City Directory search records list a dry cleaner (Nu Brite Cleaners) in operation at the Site between 1950 and 1988 and identified it as a Resources Conservation and Recovery Act (RCRA) Non-Generator of hazardous wastes between 1999 and 2007.

In addition, Hydro Tech reported that, between 2000 and 2005, the rear portion of the commercial space was leased to Global Entrepreneurship Inc., which provided dry cleaning services with offsite dry cleaning operations. It is unclear if the "rear portion" of the commercial space refers to the small one-story building located west of the main building or to another section of the main commercial space.

In accordance with an approved Soil Vapor and Indoor Air Investigation Work Plan, dated March 14, 2013, and prepared by Integral, soil vapor and indoor air sampling was conducted within the Site building in March 2013. The results were compared to New York State Department of Health (NYSDOH) Air Guideline Values (AGVs) and NYSDOH soil vapor and indoor air matrices. The results of this investigation indicated that concentrations of tetrachloroethene (PCE) and trichloroethylene (TCE) exceeded their respective indoor air AGVs in sub-slab soil vapor samples collected within the footprint of the main Site building. While AGVs are standards for indoor air concentrations, they are used here as a screening level for soil vapor.

TCE was detected at concentrations below its AGV in indoor air samples collected from the basement and first floor of the property building. PCE was detected above its AGV in one basement sample.

2 INTERIM REMEDIAL MEASURE

2.1 GOVERNING DOCUMENTS

In March 2015, Integral submitted a Soil Vapor Intrusion (SVI) Mitigation Work Plan Letter (Work Plan) to present the design details for mitigation measures to reduce potential vapor intrusion at the property. An active Sub-Slab Depressurization System (SSDS) and a vapor barrier were proposed. The NYSDEC approved the Work Plan on March 26, 2015.

2.1.1 Site Specific Health & Safety Plan (HASP)

All work performed under this IRM was in full compliance with governmental requirements, including Site and worker safety requirements mandated by Federal OSHA.

The HASP was complied with for all IRM work performed at the Site.

2.1.2 Citizen Participation Plan

A Citizen Participation Plan (CPP) was filed for the site in November 2013. The CPP gave an overview of the environmental site history and outlined the next steps for investigation and remedy selection. The CPP was approved by the NYSDEC on November 7, 2013.

2.2 INTERIM REMEDIAL MEASURE PROGRAM ELEMENTS

The primary objective of the IRM outlined in the Work Plan was to reduce the risk of intrusion of sub-slab soil vapor into the buildings on the property by:

- Installing a retro-fitted vapor barrier on the basement slab to remove air flow pathways; and
- Installing an active SSDS to create negative pressure across the slab.

2.2.1 REMEDIAL CONTRACTS

3SK was ultimately responsible for implementing the IRM in accordance with the BCA and the NYSDEC guidance document for site investigation and remediation, DER-10. The following sections describe the roles and responsibilities of the other entities involved with the project.

2.2.1.1 Regulatory Agencies

The NYSDEC and the NYSDOH shared regulatory responsibilities for this IRM.

The NYSDEC project manager, Bryan Wong, received monthly progress reports prepared by Integral and was on site on the day of active SSDS commissioning. Mr. Wong also reviewed and approved the Work Plan.

The NYSDOH project manager, Stephanie Selmer, received monthly progress reports prepared by Integral and reviewed the Work Plan.

2.2.1.2 Certifying Engineer

3SK selected Integral to carry out the IRM activities. Integral's responsibilities were: preparation of work plans and reports, design of the engineering controls, oversight of construction activities, coordination with NYSDEC and NYSDOH, and collection and documentation of confirmatory engineering control data.

2.2.1.3 IRM Contractors

The Retro-Coat vapor barrier was supplied by Land Science Technologies and installed by their certified contractor, Manhattan Concrete, Inc.

The SSDS was installed by Mitigation Tech.

2.3 CONTAMINATED MATERIALS REMOVAL

No contaminated materials were removed from the Site during this IRM.

2.4 IMPORTED BACKFILL

No backfill was imported to the Site during this IRM.

2.5 ENGINEERING CONTROLS

Since remaining contamination exists beneath the site, Engineering Controls (EC) are required to protect human health and the environment. The site has the following primary Engineering Controls, as described in the following subsections.

2.5.1 Vapor Barrier Installation

After the pressure relief points and riser piping were installed, the basement slab was sealed with Retro-Coat vapor intrusion coating. Retro-Coat is a coating system developed by Land Science Technologies that is designed to be applied on existing structures to protect against the risk of vapor intrusion.

The installed vapor barrier system consists of a 20 mil high moisture resistant primer and a 20 mil Retro-Coat barrier. The system was installed under Integral supervision in two stages (primer and Retro-Coat) by Manhattan Concrete Inc., an installer certified by Land Science Technologies.

2.5.2 Active SSDS Installation

The SSDS was constructed in substantial compliance with the Work Plan, with the modifications shown in the As-Built Drawing (Figure 1) and described in Section 2.7 below.

The SSDS consists of six pressure relief points installed beneath the basement slab that connect to a Radonaway RP265 fan on the roof via a polyvinyl chloride (PVC) riser pipe. To create the pressure relief points, the existing slab was cored and the void space was filled with 1.5" clean stone aggregate. A PVC pipe (4" nominal size) was inserted into the void space. The slab penetration point was sealed with bituthene liquid membrane. The riser pipes were connected to one common header pipe that runs to the roof of the 1-story back building. All horizontal piping runs were slightly pitched back towards the pressure relief point to allow for drainage of moisture.

Sub-slab vacuum monitoring points (VMPs) were installed to measure sub-slab differential pressure. Each VMP consisted of a ¾ in. threaded steel sleeve installed in a penetration through the concrete slab and flush with the surface of the slab. The slab penetration point was sealed with a bituthene liquid membrane. The VMPs were plugged when not being used to measure differential pressure. The VMP locations were determined during construction to cover as much of the basement slab as practicable without interfering with the usage of the building. Please see Figure 1 for final pressure relief point and VMP locations.

A u-tube manometer was installed on one of the pressure relief riser pipes, near the header pipe, which provides a visual indication that the SSDS fan is operating and also helps evaluate system performance by comparing pressure relief point pressures to VMP pressures. The building manager will be responsible to inspect the U-tube manometer a minimum of once a month, as outlined in the interim Site Management Plan (interim SMP). Above-grade piping was labeled to indicate that it is part of the SSDS. Labels were placed approximately every 10 feet stating "SOIL VENT – DO NOT DISCONNECT".

Procedures for monitoring, operating and maintaining the active SSDS are provided in the interim SMP (Appendix B). The interim SMP also addresses inspection procedures that must occur after any severe weather condition has taken place that may affect on-site ECs.

2.6 INSTITUTIONAL CONTROLS

If required, the final site remedy will include an environmental easement or deed restriction placed on the property.

2.7 REMEDIAL PERFORMANCE/DOCUMENTATION SAMPLING

Manual differential pressure measurements were collected by connecting a digital micromanometer to the VMPs installed throughout the basement. As discussed in the Work Plan, differential pressure readings at or above 0.004 inches of water column (in WC) are considered acceptable.

VMP readings were collected three times over the first month of SSDS operation. The results are included in the table below.

Table 1. SSDS Differential Pressure Measurements

Location	Differential Pressure (inWC)		
	3/31/2016	4/14/2016	4/28/2016
VMP1	-0.023	-0.027	-0.024
VMP2	-0.055	-0.059	-0.056
VMP3	-0.042	-0.042	-0.042
VMP4	-0.021	-0.022	-0.023
VMP5	-0.010	-0.007	-0.005
VMP6	-0.011	-0.011	-0.005
VMP7	-0.010	-0.007	-0.004

inWC inches of water column

SSDS = sub-slab depressurization system

If the differential pressure at a VMP increases to greater than -0.004 inWC, then pressure will be increased by adjusting the butterfly valves on each pressure relief point riser pipe or upgrading the SSDS fan.

2.8 CONTAMINATION REMAINING AT THE SITE

As presented in the above sections, the primary objective of this IRM was to protect human health by preventing sub-slab soil vapor from intruding into the buildings at the property; this

IRM does not include any source removal. Remedial investigation (RI) is complete and an RI Report is being prepared¹.

2.9 DEVIATIONS FROM THE WORK PLAN

The pressure relief points and VMPs were field located by Integral to account for building obstructions and the day-to-day usage of the building.

2.9.1 Pressure Relief Points

The pressure relief points in the basement of the 4-story building were placed in roughly the same locations as shown in the Work Plan. Locations were selected in order to minimize riser pipe bends, and therefore minimize pressure losses.

The pressure relief point in the basement of 1-story back building was moved approximately 10 feet northeast. The basement contains a boiler and only has about 25 ft² of open unobstructed floor area.

No sub-slab soil was removed during the installation of the pressure relief points.

2.9.2 Vacuum Monitoring Points

The VMPs in the basement of the 4-story building were moved to accommodate obstructions and day-to-day building operations. The basement contains several built-in shelving units against the walls and stores a large amount of supplies for the store on the 1st floor of the building. The VMP locations were selected to cover as much of the slab as practicable given the obstructions present.

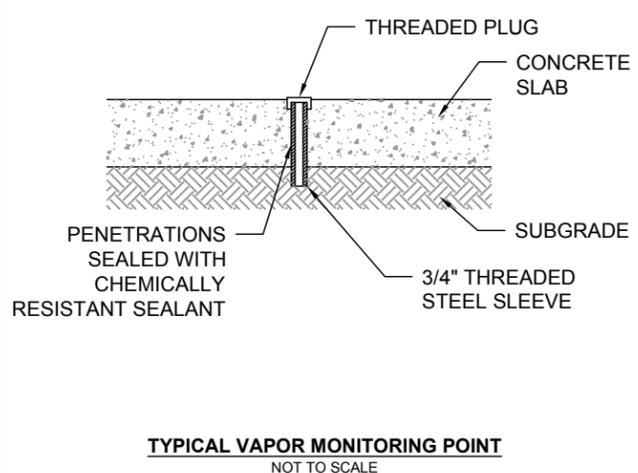
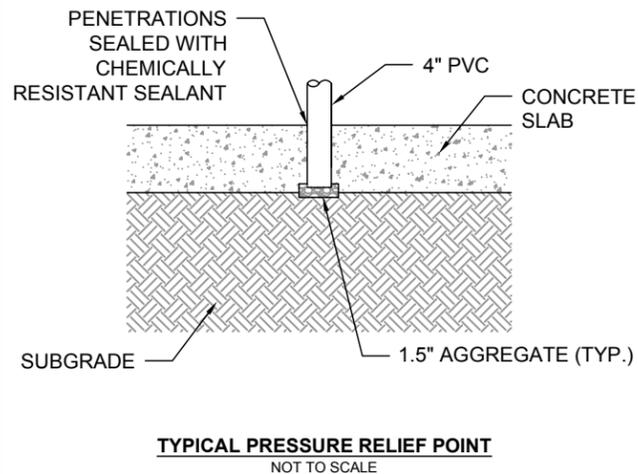
Only one VMP was installed in the basement of the 1-story back building due to limited open floor area.

¹ A separate, off-site investigation is currently in progress.

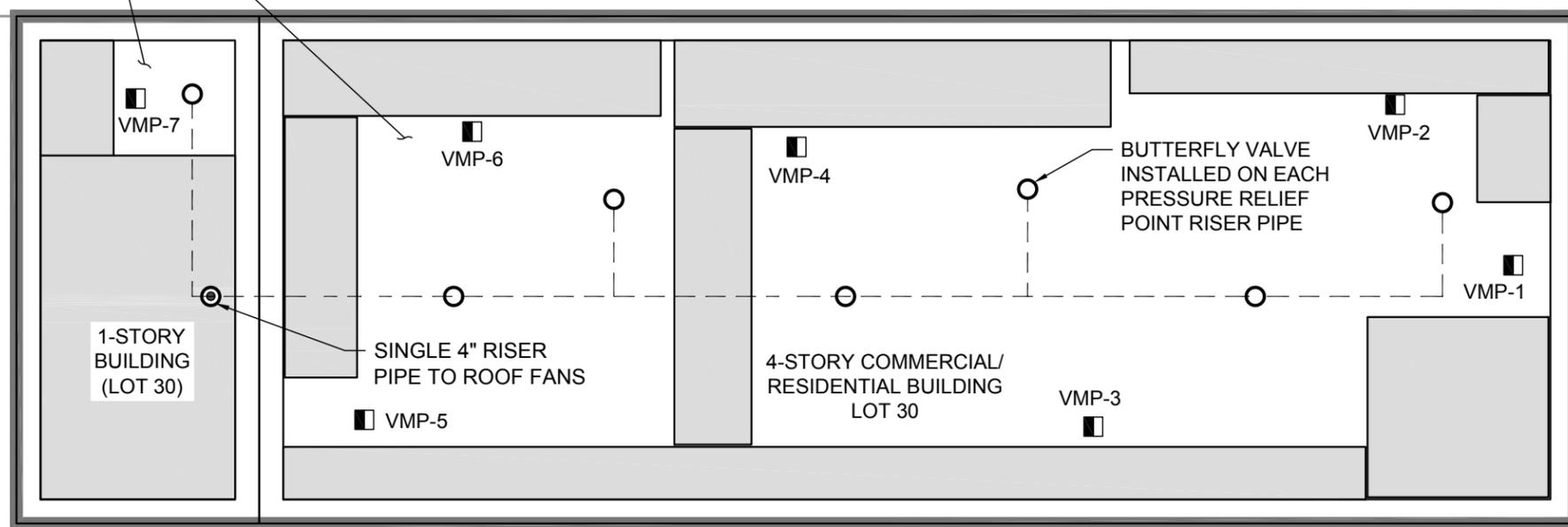
FIGURE 1

AS-BUILT DRAWING

P:\Projects\ED41_3SK_35KCorp\CAD\Production Drawings\CCRI\Figure_1_SSDS_layout.dwg 7/11/2016 9:31:36 AM

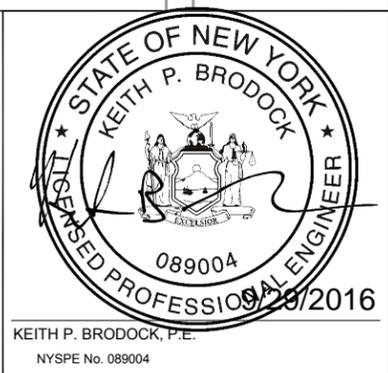


RETRO-COAT VAPOR BARRIER APPLIED TO BASEMENT FLOOR



- LEGEND:**
- PERMANENT SHELVING AND OTHER OBSTRUCTIONS
 - SITE BOUNDARY
 - 4" PRESSURE RELIEF POINT AND PVC RISER
 - VMP
 - 4" RISER PIPE TO ROOF
 - 4" HEADER PIPE

- NOTES:**
1. THE SSDS USES A RADONAWAY RP265 FAN.
 2. THE SSDS FAN WILL OPERATE CONTINUOUSLY.
 3. ALL SLAB PENETRATIONS ARE SEALED WITH GRACE BIUTHENE LIQUID MEMBRANE.
 4. A U-TUBE MANOMETER WAS INSTALLED ON ONE PRESSURE RELIEF POINT RISER PIPE TO MEASURE SYSTEM PRESSURE.
 5. WORK WAS DONE IN ACCORDANCE WITH ALL FEDERAL, STATE, AND LOCAL LAWS, REGULATIONS, AND GUIDANCE.
 6. INTERIOR PIPE IS IDENTIFIED BY THE WORDS "SOIL VENT PIPE - DO NOT DISCONNECT"
 7. ALL HORIZONTAL PIPE IS PITCHED A MINIMUM OF 1/8-INCH PER FOOT TOWARD THE PRESSURE RELIEF POINT.
 8. ONE BUTTERFLY VALVE WAS INSTALLED ON EACH PRESSURE RELIEF POINT RISER PIPE.



IT IS A VIOLATION OF THE NEW YORK STATE EDUCATION LAW FOR ANY PERSON TO ALTER ANY DOCUMENT THAT BEARS THE SEAL OF A PROFESSIONAL ENGINEER, UNLESS THE PERSON IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER.

integral
engineering p.c.

61 BROADWAY, SUITE 1601
NEW YORK, NEW YORK
www.integral-corp.com

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Feet

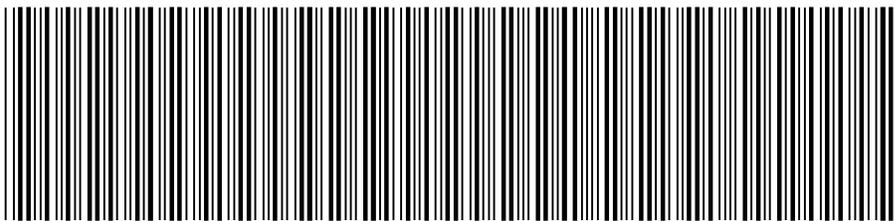
Figure 1.
Sub-Slab Depressurization System (SSDS) As-Built Drawing
1299 1st Avenue
New York, New York

APPENDIX A

METES AND BOUNDS

**NYC DEPARTMENT OF FINANCE
OFFICE OF THE CITY REGISTER**

This page is part of the instrument. The City Register will rely on the information provided by you on this page for purposes of indexing this instrument. The information on this page will control for indexing purposes in the event of any conflict with the rest of the document.



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RECORDING AND ENDORSEMENT COVER PAGE

PAGE 1 OF 5

Document ID: 2012121700828006

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Document Page Count: 4

PRESENTER:

MADISON TITLE AGENCY, LLC
(PICK-UP-RAPID) AS AGENT FOR OLD REPUBLIC
1125 OCEAN AVENUE
LAKEWOOD, NJ 08701
212-808-9400
acris-notifications@madisoncres.com

RETURN TO:

ANDREW W. ALBSTEIN, ESQ
GOLDBERG WEPRIN FINKEL GOLDSTEIN LLP
1501 BROADWAY, 22ND FLOOR
NEW YORK, NY 10036
MTANY-072956 [cr]

PROPERTY DATA

Borough	Block	Lot	Unit	Address
MANHATTAN	1444	30	Entire Lot	1299 1ST AVENUE

Property Type: COMMERCIAL REAL ESTATE

CROSS REFERENCE DATA

CRFN _____ or Document ID _____ or Year _____ Reel _____ Page _____ or File Number _____

PARTIES

GRANTOR/SELLER:

3SK CORP
C/O YOON KU KIM, 27-15 27TH STREET
ASTORIA, NY 11102

GRANTEE/BUYER:

1299 FIRST LLC
C/O GOLDBERG WEPRIN FINKEL GOLDSTEIN LLP,
1501 BROADWAY, 22ND FLOOR
NEW YORK, NY 10036

FEES AND TAXES

Mortgage			Filing Fee:	
Mortgage Amount:	\$	0.00	\$	250.00
Taxable Mortgage Amount:	\$	0.00	NYC Real Property Transfer Tax:	
Exemption:			\$	123,375.00
TAXES: County (Basic):	\$	0.00	NYS Real Estate Transfer Tax:	
City (Additional):	\$	0.00	\$	18,800.00
Spec (Additional):	\$	0.00		
TASF:	\$	0.00		
MTA:	\$	0.00		
NYCTA:	\$	0.00		
Additional MRT:	\$	0.00		
TOTAL:	\$	0.00		
Recording Fee:	\$	57.00		
Affidavit Fee:	\$	0.00		

**RECORDED OR FILED IN THE OFFICE
OF THE CITY REGISTER OF THE
CITY OF NEW YORK**

Recorded/Filed 12-31-2012 13:59
City Register File No.(CRFN):
2012000508560



Annette McMill

City Register Official Signature

CONSULT YOUR LAWYER BEFORE SIGNING THIS INSTRUMENT - THIS INSTRUMENT SHOULD BE USED BY LAWYERS ONLY.

THIS INDENTURE, made as of the 6 day of December, Two Thousand and Twelve

BETWEEN

3SK CORP.,

having an address c/o Yoon Ku Kim, 27-15 27th Street, Astoria, New York 11102,

party of the first part, and

1299 FIRST LLC,

having an address c/o Goldberg Weprin Finkel Goldstein LLP,
1501 Broadway, 22nd Floor, New York, New York 10036,

party of the second part,

WITNESSETH, that the party of the first part, in consideration of ten dollars and other valuable consideration paid by the party of the second part, does hereby grant and release unto the party of the second part, the heirs or successors and assigns of the party of the second part forever,

ALL that certain plot, piece or parcel of land, with the buildings and improvements thereon erected, situate, lying and being in the BOROUGH OF MANHATTAN, CITY, COUNTY AND STATE OF NEW YORK, bounded and described more particularly as set forth in Schedule A annexed hereto and made a part hereof;

See SCHEDULE A annexed hereto.

PREMISES known as 1299 First Avenue, New York, New York.

TOGETHER with all right, title and interest, if any, of the party of the first part in and to any streets and roads abutting the above described premises to the center of the lines thereof; **TOGETHER** with the appurtenances and all the estate and rights of the party of the first part in and to the premises; **TO HAVE AND TO HOLD** the premises herein granted unto the party of the second part, the heirs or successors and assigns of the party of the second part forever.

AND the party of the first part covenants that the party of the first part has not done or suffered anything whereby the said premises have been encumbered in any way whatever, except as aforesaid.

AND the party of the first part, in compliance with Section 13 of the Lien Law, covenants that the party of the first part will receive the consideration for this conveyance and will hold the right to receive such consideration as a trust fund to be applied first for the purpose of paying the cost of improvement and will apply the same first to the payment of the cost of the improvement before using any part of the total of the same for any other purpose.

The word "party" shall be construed as if it read "parties" whenever the sense of this indenture so requires.

IN WITNESS WHEREOF, the party of the first part has duly executed this deed the day and year first above written.

IN PRESENCE OF:

3SK CORP.

By: 
Name Daniel Kim
Title: Pres

STATE OF NEW YORK)
COUNTY OF NEW YORK *Nassau* ss:

On the 6 day of Dec. in the year 2012, before me, the undersigned a notary public in and for said state, personally appeared Daniel Kim, personally known to me or proved to me on the basis of satisfactory evidence to be the individual whose name is subscribed to the within instrument and acknowledged to me that he executed the same in his capacity, and that by his signature on the instrument, the individual, or the person upon behalf of which the individual acted, executed the instrument.



Notary Public

ELISHEVA BASCH
Notary Public State of NY
No. 01BA6055777
Qualified in Kings County
Comm. Expires 03/30/15

SEAL

STATE OF NEW YORK)
COUNTY OF NEW YORK) ss:

On the _____ day of _____ in the year 2012, before me, the undersigned a notary public in and for said state, personally appeared _____ personally known to me or proved to me on the basis of satisfactory evidence to be the individual whose name is subscribed to the within instrument and acknowledged to me that he executed the same in his capacity, and that by his signature on the instrument, the individual, or the person upon behalf of which the individual acted, executed the instrument.

Notary Public

**BARGAIN AND SALE DEED
WITH COVENANTS
AGAINST GRANTOR'S ACTS**

SECTION:
BLOCK: 1444
LOT: 30
COUNTY: New York
1299 First Avenue
New York, New York

TITLE NO.

3SK CORP.

- to -

1299 FIRST LLC

RETURN BY MAIL TO:

Goldberg Weprin Finkel Goldstein LLP
1501 Broadway, 22nd Floor
New York, New York 10036
Attn: Andrew W. Albstein, Esq.

Old Republic National Title Insurance Company

Title No.: MTANY-072956

SCHEDULE A CONTINUED

LEGAL DESCRIPTION

ALL that certain plot, piece or parcel of land, with the buildings and improvements thereon erected, situate, lying and being in the Borough of Manhattan, City, County and State of New York, bounded and described as follows:

BEGINNING at the southwesterly corner of First Avenue and 70th Street;

RUNNING THENCE westerly along the southerly side of 70th Street, 77 feet;

THENCE southerly parallel with the westerly side of First Avenue, 25 feet 4 inches;

THENCE easterly and parallel with the southerly side of 70th Street and part of the distance through a party wall, 77 feet to the westerly side of First Avenue;

THENCE northerly along said westerly side of First Avenue, 25 feet 4 inches to the point or place of BEGINNING.

NOTE: Being District , Section , Block(s) 1444, Lot(s) 30, Tax Map of the Borough of New York, County of New York.

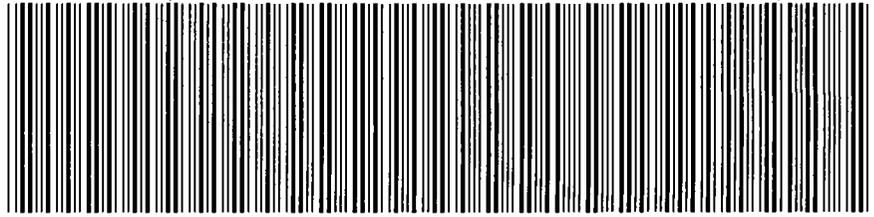
NOTE: Lot and Block shown for informational purposes only.

Issued by:

Madison Title Agency, LLC
1125 Ocean Avenue, Lakewood, NJ 08701
Telephone: 212-808-9400 Fax: 212-808-9420

(072956.PFD/072956/116)

NYC DEPARTMENT OF FINANCE
OFFICE OF THE CITY REGISTER



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SUPPORTING DOCUMENT COVER PAGE

PAGE 1 OF 1

Document ID: 2012121700828006

Document Date: 12-06-2012

Preparation Date: 12-17-2012

Document Type: DEED

ASSOCIATED TAX FORM ID: 2012120600004

SUPPORTING DOCUMENTS SUBMITTED:

	Page Count
DEP CUSTOMER REGISTRATION FORM FOR WATER AND SEWER BILLING	1
RP - 5217 REAL PROPERTY TRANSFER REPORT	2

FOR CITY USE ONLY

C1. County Code C2. Date Deed Recorded **DEC 24 2012**
 Month Day Year

C3. Book OR C4. Page
 C5. CRFN



REAL PROPERTY TRANSFER REPORT
 STATE OF NEW YORK
 STATE BOARD OF REAL PROPERTY SERVICES
RP - 5217NYC

PROPERTY INFORMATION

1. Property Location 1299 1ST AVENUE MANHATTAN 10021
STREET NUMBER STREET NAME BOROUGH ZIP CODE

2. Buyer Name 1299 FIRST LLC
LAST NAME / COMPANY FIRST NAME

3. Tax Billing Address
Indicate where future Tax Bills are to be sent if other than buyer address (at bottom of form)
LAST NAME / COMPANY FIRST NAME

4. Indicate the number of Assessment Roll parcels transferred on the deed 1 # of Parcels OR Part of a Parcel

5. Deed Property Size FRONT FEET X DEPTH OR ACRES

8. Seller Name 3SK CORP
LAST NAME / COMPANY FIRST NAME

4A. Planning Board Approval - N/A for NYC
 4B. Agricultural District Notice - N/A for NYC

Check the boxes below as they apply:

6. Ownership Type is Condominium
 7. New Construction on Vacant Land

9. Check the box below which most accurately describes the use of the property at the time of sale:

A One Family Residential C Residential Vacant Land E Commercial G Entertainment / Amusement I Industrial
 B 2 or 3 Family Residential D Non-Residential Vacant Land F Apartment H Community Service J Public Service

SALE INFORMATION

10. Sale Contract Date 2 / 23 / 2012
Month Day Year

11. Date of Sale / Transfer 12 / 6 / 2012
Month Day Year

12. Full Sale Price \$ 4 7 0 0 0 0 0
(Full Sale Price is the total amount paid for the property including personal property. This payment may be in the form of cash, other property or goods, or the assumption of mortgages or other obligations.) Please round to the nearest whole dollar amount.

13. Indicate the value of personal property included in the sale

14. Check one or more of these conditions as applicable to transfer:

A Sale Between Relatives or Former Relatives
 B Sale Between Related Companies or Partners in Business
 C One of the Buyers is also a Seller
 D Buyer or Seller is Government Agency or Lending Institution
 E Deed Type **not** Warranty or Bargain and Sale (Specify Below)
 F Sale of Fractional or Less than Fee Interest (Specify Below)
 G Significant Change in Property Between Taxable Status and Sale Dates
 H Sale of Business is Included in Sale Price
 I Other Unusual Factors Affecting Sale Price (Specify Below)
 J None

ASSESSMENT INFORMATION - Data should reflect the latest Final Assessment Roll and Tax Bill

15. Building Class C, 7 16. Total Assessed Value (of all parcels in transfer) 5 6 0 8 0 2
MANHATTAN 1444 30

CERTIFICATION

I certify that all of the items of information entered on this form are true and correct (to the best of my knowledge and belief) and understand that the making of any willful false statement of material fact herein will subject me to the provisions of the penal law relative to the making and filing of false instruments.

BUYER			BUYER'S ATTORNEY	
BUYER SIGNATURE <i>[Signature]</i> by: <i>Gait Levy, managing member</i>		LAST NAME		FIRST NAME
C/O HOMESTATE PROPERTIES LLC 261 WEST 35TH STREET				
STREET NUMBER	STREET NAME (AFTER SALE)	AREA CODE	TELEPHONE NUMBER	
	NEW YORK			
CITY OR TOWN	STATE	ZIP CODE	SELLER SIGNATURE	DATE
	NY	10001	<i>[Signature]</i> by: <i>Daniel Kim, member</i>	12/6/12



The City of New York
 Department of Environmental Protection
 Bureau of Customer Services
 59-17 Junction Boulevard
 Flushing, NY 11373-5108

Customer Registration Form for Water and Sewer Billing

Property and Owner Information:

- (1) Property receiving service: BOROUGH: MANHATTAN BLOCK: 1444 LOT: 30
- (2) Property Address: 1299 1ST AVENUE, NEW YORK, NY 10021
- (3) Owner's Name: 1299 FIRST LLC

Additional Name:

Affirmation:



Your water & sewer bills will be sent to the property address shown above.

Customer Billing Information:

Please Note:

- A. Water and sewer charges are the legal responsibility of the owner of a property receiving water and/or sewer service. The owner's responsibility to pay such charges is not affected by any lease, license or other arrangement, or any assignment of responsibility for payment of such charges. Water and sewer charges constitute a lien on the property until paid. In addition to legal action against the owner, a failure to pay such charges when due may result in foreclosure of the lien by the City of New York, the property being placed in a lien sale by the City or Service Termination.
- B. Original bills for water and/or sewer service will be mailed to the owner, **at the property address or to an alternate mailing address**. DEP will provide a duplicate copy of bills to one other party (such as a managing agent), however, any failure or delay by DEP in providing duplicate copies of bills shall in no way relieve the owner from his/her liability to pay all outstanding water and sewer charges. Contact DEP at (718) 595-7000 during business hours or visit www.nyc.gov/dep to provide us with the other party's information.

Owner's Approval:

The undersigned certifies that he/she/it is the owner of the property receiving service referenced above; that he/she/it has read and understands Paragraphs A & B under the section captioned "Customer Billing Information"; and that the information supplied by the undersigned on this form is true and complete to the best of his/her/its knowledge.

Print Name of Owner: _____
 Signature: 

Date (mm/dd/yyyy) 12/6/12

Name and Title of Person Signing for Owner, if applicable: Galit Levy, managing member

APPENDIX B

INTERIM SITE MANAGEMENT PLAN

INTERIM SITE MANAGEMENT PLAN

Former Nu Brite Cleaners

1299 1st Avenue

New York, New York 10021

NYSDEC BCP Number: C231072

Prepared for
3SK Corporation
27-15 27th Street
Astoria, NY 11102

Prepared by
integral
engineering p.c.

61 Broadway
Suite 1601
New York, NY 10006

September 26, 2016

Revised: September 29, 2016

Affiliated with Integral Consulting Inc.

CERTIFICATION

I, Keith P. Brodock, PE, certify that I am currently a registered professional engineer licensed by the State of New York and that this Interim Site Management Plan was prepared in accordance with all applicable statutes and regulations and in substantial conformance with the DER Technical Guidance for Site Investigation and Remediation (DER-10).

I certify that all the information and statements in this certification form 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, Keith P. Brodock, PE, of Integral Engineering, P.C., am certifying as Owner's designated Site Representative for this site.



089004

NYS Professional Engineer #

9/29/2016

Date

Signature

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ACRONYMS AND ABBREVIATIONS

3SK	3SK Corporation
AGV	Air Guideline Value
AST	above ground storage tank
BCA	Brownfield Cleanup Agreement
bsg	below sidewalk grade
CCR	Construction Completion Report
DER	Division of Environmental Remediation
DER-10	<i>Technical Guidance for Site Investigation and Remediation</i>
EC	Engineering Control
FER	Final Engineering Report
Hydro Tech	Hydro Tech Environmental Corp.
in WC	inches of water column
IC	Institutional Control
Integral	Integral Engineering, P.C.
IRM	Interim remedial measure
NYSDEC	New York State Department of Environmental Conservation
NYSDOH	New York State Department of Health
OSHA	Occupational Safety and Health Administration
PCE	tetrachloroethene
PVC	polyvinyl chloride
RCRA	Resources Conservation and Recovery Act
RAO	remedial action objectives
RI	Remedial Investigation
SMP	site management plan
SSDS	sub-slab depressurization system
SVI	soil vapor intrusion
TCE	trichloroethylene
USGS	United States Geological Survey

VMP vacuum monitoring point
Work Plan Soil Vapor Intrusion Mitigation Work Plan Letter

1 INTRODUCTION

Integral Engineering, P.C. (Integral) is pleased to present this Interim Site Management Plan (SMP) on behalf of 3SK Corporation (3SK) that details the operation, monitoring, and maintenance of the Interim Remedial Measures (IRMs) installed at 1299 1st Avenue, Manhattan, NY (the property). 3SK entered into a Brownfield Cleanup Agreement (BCA) with the New York State Department of Environmental Conservation (NYSDEC) on August 30, 2013, to investigate and remediate an approximately 1,957 square foot property located in the Upper East Side section of the Borough of Manhattan, New York.

IRMs were designed and constructed at the property in March 2016 to reduce the risk of intrusion of sub-slab soil vapor into property buildings. The IRMs consist of a soil cap, vapor barrier, and active sub-slab depressurization system (SSDS). A construction completion report (CCR) was issued for the property after the vapor barrier and SSDS were constructed and confirmed to be operational by a Professional Engineer. This Interim SMP is to serve as a companion document to the CCR. Remedial investigation (RI) is complete and an RI Report is being prepared¹. A final SMP will be included upon site closure and the issuance of the Final Engineering Report (FER).

1.1 NOTIFICATIONS

Notifications will be submitted to the NYSDEC, as needed, in accordance with NYSDEC's DER-10 for the following reasons:

- 60-day advance notice of any proposed changes in site use that are required under the terms of the BCA, 6 NYCRR part 375 and/or Environmental Conservation Law.
- 7-day advance notice of any field activity associated with the remedial program.
- 15-day advance notice of any proposed ground-intrusive activity pursuant to the Excavation Work Plan (Attachment 4).
- Notice within 48-hours of any damage or defect to the foundation, structures or Engineering Control (EC) that reduces or has the potential to reduce the effectiveness of an EC, and likewise, any action to be taken to mitigate the damage or defect.
- Verbal notice by noon of the following day of any emergency, such as a fire; flood; or earthquake that reduces or has the potential to reduce the effectiveness of ECs in place at

¹ A separate, off-site investigation is currently in progress.

the site, with written confirmation within 7 days that includes a summary of actions taken, or to be taken, and the potential impact to the environment and the public.

- Follow-up status reports on actions taken to respond to an emergency event requiring ongoing responsive action submitted to the NYSDEC within 45 days describing and documenting actions taken to restore the effectiveness of the ECs.

Any change in the ownership of the site or the responsibility for implementing this SMP will include the following notifications:

- At least 60 days prior to the change, the NYSDEC will be notified in writing of the proposed change. This will include a certification that the prospective purchaser/Remedial Party has been provided with a copy of the BCA, and all approved work plans and reports, including this interim SMP.
- Within 15 days after the transfer of all or part of the site, the new owner's name, contact representative, and contact information will be confirmed in writing to the NYSDEC.

Table 1 below includes contact information for the above notification. The information on this table will be updated as necessary to provide accurate contact information.

Table 1. Contact Information

Name	Role	Phone	Email
1299 First LLC	Property Owner Representative	(212) 693-9000	ron@homestateproperties.com
James L'Esperance, P.E.	Oversight Consultant Representative	(424) 238-8299	jlesperance@integral-corp.com
Keith P. Brodock, P.E.	Professional Engineer	(212) 440-6702	kbrodock@integral-corp.com
Bryan Wong	NYSDEC Project Manager	(718) 482-4905	Yukyin.wong@dec.ny.gov
Stephanie Selmer	NYSDOH Project Manager	(518) 402-7860	Stephanie.selmer@health.ny.gov
Jane O'Connell	Superfund and Brownfield Cleanup Section	(718) 482-4599	Jane.oconnell@dec.ny.gov
Kelly Lewandowski	DER Site Control	(518) 402-9553	Kelly.lewandowski@dec.ny.gov

2 SUMMARY OF PREVIOUS INVESTIGATIONS AND REMEDIAL ACTIONS

Integral conducted an RI in December 2013 that included the implementation of a portion of the approved RI scope of work. This initial phase of investigation included the collection of soil, soil gas, bedrock, and groundwater samples for the evaluation of onsite contaminant concentrations, evaluation of potential offsite migration of previously identified chlorinated solvent contamination, and assessment of potential remedial actions. A summary of the findings from the 2013 investigation and IRM design are provided in the following sections.

2.1 SITE LOCATION AND DESCRIPTION

The property is located in a commercial and residential area of the Upper East Side section of the Borough of Manhattan. The property is comprised of an approximately 1,957 square foot rectangular parcel located on the corner of the block and is bounded to the north by 70th Street; to the east by 1st Avenue; to the south by 69th Street; and to the west by 2nd Avenue. Adjacent properties include mixed use commercial and residential buildings to the south, west and east; and a senior center to the north. The property is identified on New York City tax maps as Block 1444, Lot 30. The boundaries of the site are fully described in CCR Appendix A: Metes and Bounds.

2.2 PHYSICAL SETTING

2.2.1 Land Use

The property incorporates approximately 0.45 acres of fairly level land situated in the City of New York, New York County, New York. The property is mapped on the Central Park, NY-NJ and Brooklyn Quadrant 7.5 Minute Topographic Map, published by the United States Geological Survey (USGS). Review of the topographic map indicates that the property is located approximately 50 feet above sea level (NGVD 1988).

The property is currently developed with a 4-story commercial/residential building (measuring approximately 25' x 65'). The first floor of the building is utilized as a convenience store and pharmacy. The basement depth is approximately 6 ft below sidewalk grade (bsg) and is divided into two sections, both of which are used for storage. Two 275-gallon above ground storage tanks (ASTs) containing number two fuel oil are located in the western section of the basement. Residential units occupy floors two through four, with two units per floor. Within the footprint of the property is a separate one-story building (measuring approximately 12' x 25') located west of the main property building. This building is presently utilized as a dry cleaning drop-off and pick up facility and shares a wall with the main building. There is a small (10' x 20')

space located beneath the one story building that contains a boiler. Integral understands that this boiler services both onsite buildings.

2.2.2 Geology

Previous reports have characterized the sediment beneath the property as poorly graded brown sand with some pebbles. Bedrock geology in the vicinity of the property is characterized as the Hartland Formation (Middle Ordovician to Lower Cambrian). The Hartland formation consists of interbedded units of fine- grained quartz-feldspar, fine- to coarse-grained quartzofeldspathic, muscovite-biotite-garnet schist, and quartz-biotite-hornblend amphibolite. Much of the schist is magnetic and is in thrust-fault contact with the underlying Manhattan Schist on the Cameron's Line thrust, which goes beneath the Triassic and Triassic Newark basin sediments..

2.2.3 Hydrogeology

Groundwater has been measured at depths ranging from approximately 15 to 20 ft bsg. Regional groundwater flow is expected to be east-northeast towards the East River; local groundwater follow is assumed to be the same. The topography of the property is relatively flat. No formal elevation survey has been conducted to provide exact groundwater elevations; a formal elevation survey will be performed during the RI.

2.2.4 Past Site Uses

According to a record review conducted by Hydro Tech Environmental Corp. (Hydro Tech) of Commack, New York, historical Sanborn Maps indicated that the property was used as an auto body repair shop from 1927 to 1942 and as a dry cleaner between 1976 and 1996. City Directory search records list a dry cleaner (Nu Brite Cleaners) in operation at the property between 1950 and 1988 and identified it as a Resources Conservation and Recovery Act (RCRA) Non-Generator of hazardous wastes between 1999 and 2007.

In addition, Hydro Tech reported that, between 2000 and 2005, the rear portion of the commercial space was leased to Global Entrepreneurship Inc., which provided dry cleaning services with offsite dry cleaning operations. It is unclear if the "rear portion" of the commercial space refers to the small one-story building located west of the main building or to another section of the main commercial space.

2.3 INVESTIGATION AND REMEDIAL HISTORY

2.3.1 Soil Vapor and Indoor Air Investigation

Soil vapor and indoor air sampling was conducted within the property building by Integral in March 2013. The results were compared to New York State Department of Health (NYSDOH) Air Guideline Values (AGVs) and NYSDOH soil vapor and indoor air matrices. The results of this investigation indicated that concentrations of tetrachloroethene (PCE) and trichloroethylene (TCE) exceeded their respective indoor air AGVs in sub-slab soil vapor samples collected within the footprint of the main property building. While AGVs are standards for indoor air concentrations, they are used here as a screening level for soil vapor.

TCE was detected at concentrations below its AGV in indoor air samples collected from the basement and first floor of the property building. PCE was detected above its AGV in one basement sample.

2.3.2 Remedial History

Integral submitted a Soil Vapor Intrusion (SVI) Mitigation Work Plan Letter (Work Plan) to present the design details for mitigation measures to reduce potential vapor intrusion at the property in April 2015. An active SSDS and a vapor barrier were proposed as an Interim remedial action IRM.

IRM construction was performed in March 2016 with oversight by Integral under the supervision of Keith P. Brodock, P.E., a New York State registered Professional Engineer. The SSDS was constructed in substantial compliance with the Integral March 2015 SSDS Design Document, with modifications to the approved plans shown in the As-Built Drawing (Figure 1) and discussed in the CCR.

2.4 REMEDIAL ACTION OBJECTIVES

The primary objective of the IRM is to protect human health by mitigating the risk of sub-slab soil vapor intrusion into the buildings at the property. RI is complete and an RI Report is being prepared. The remedial action objectives (RAOs) will be provided in the final SMP at the time of issuance of the FER.

2.5 REMAINING CONTAMINATION

RI is complete and an RI Report is being prepared. Existing soil and groundwater conditions will be provided in the final SMP at the time of issuance of the FER.

3 INSTITUTIONAL AND ENGINEERING CONTROL PLAN

Since remaining contamination exists at the site, Institutional Controls (ICs) and Engineering Controls (ECs) are required to protect human health and the environment. This IC/EC Plan describes the procedures for the implementation and management of all IC/ECs at the site. The IC/EC Plan is one component of the Interim SMP and is subject to revision by the NYSDEC.

3.1 ENGINEERING CONTROLS

Since remaining contamination exists beneath the site, ECs are required to protect human health and the environment. The site has the following primary Engineering Controls, as described in the following subsections:

- Soil cap system on the basement slab
- Retro-fitted vapor barrier on the basement slab to seal potential air flow pathways; and
- Active SSDS to create negative pressure across the slab.

3.1.1 Active SSDS Installation

The SSDS was constructed in substantial compliance with the Work Plan, with modifications shown in the As-Built Drawing (Figure 1) and described in detail in the CCR.

The SSDS consists of six pressure relief points installed beneath the basement slab that connect to a Radonaway RP265 fan on the roof via a polyvinyl chloride (PVC) riser pipe. To create the pressure relief points, the existing slab was cored and the void space was filled with 1.5" clean stone aggregate. A PVC pipe (4" nominal size) was inserted into the void space. The slab penetration point was sealed with bituthene liquid membrane. The riser pipes were connected to one common header pipe that runs to the roof of the 1-story back building. All horizontal piping runs were slightly pitched back towards the pressure relief point to allow for drainage of moisture.

Sub-slab vacuum monitoring points (VMPs) were installed to measure sub-slab differential pressure. Each VMP consisted of a ¾ in. threaded steel sleeve installed in a penetration through the concrete slab and flush with the surface of the slab. The slab penetration point was sealed with a bituthene liquid membrane. The VMPs were plugged when not being used to measure differential pressure. The VMP locations were determined during construction to cover as much of the basement slab as practicable without interfering with the usage of the building (Figure 1).

Operation of the active SSDS will not be discontinued unless prior written approval is granted by the NYSDEC and the NYSDOH. In the event that monitoring data indicates that the SSDS system may no longer be required, a proposal to discontinue operation of the SSDS system will be submitted to the NYSDEC and the NYSDOH.

3.1.2 Vapor Barrier Installation

After the pressure relief points and riser piping were installed, the basement slab was sealed with Retro-Coat vapor intrusion coating. Retro-Coat is a coating system developed by Land Science Technologies that is designed to be applied on existing structures to protect against vapor intrusion.

The installed vapor barrier system consists of a 20 mil high moisture resistant primer and a 20 mil Retro-Coat barrier. The system was installed under Integral supervision in two stages (primer and Retro-Coat) by Manhattan Concrete Inc., an installer certified by Land Science Technologies.

3.1.3 Soil Cap System

Exposure to remaining contamination in soil/fill at the site is prevented by a soil cap system placed over the site. This cap system is comprised of a 4 to 6 inch concrete building slab and the vapor barrier described in the above sections.

The site cover system is a permanent control and the quality and integrity of this system will be inspected at defined, regular intervals in accordance with this Interim SMP in perpetuity.

An Excavation Work Plan has been included as Attachment 4.

3.1.4 Air Monitoring During Construction

The Site Safety Plan (Health & Safety Plan) described the air monitoring procedures during the construction of the IRM. The installation of the six SSDS pressure relief points in the basement slab was monitored with a MiniRAE 2000 photoionization detector (PID). No observations of ambient air concentration above background were observed. Since the slab penetrations were made in an enclosed space (the basement), and no observations of ambient air concentration above background occurred near the penetrations, community air monitoring was not needed for this construction.

If the ambient air concentration of total organic vapors at the downwind perimeter of the work area or exclusion zone exceeded 5 parts per million (ppm) above background for the 15-minute average, work activities would have been temporarily halted and monitoring continued. If the

total organic vapor level readily decreased (per instantaneous readings) below 5 ppm over background, work activities would have resumed with continued monitoring.

If total organic vapor levels at the downwind perimeter of the work area or exclusion zone had persisted at levels in excess of 5 ppm over background but less than 25 ppm, work activities would have been halted, the source of vapors identified, corrective actions taken to abate emissions, and monitoring continued.

If the organic vapor level was above 25 ppm at the perimeter of the work area, activities would have been shut down.

3.2 INSTITUTIONAL CONTROLS

The final site remedy will include an environmental easement or deed restriction placed on the property, as required.

4 OPERATIONS, MAINTENANCE, AND MONITORING PLAN

Site ECs will be periodically evaluated to confirm that the remedy continues to be effective in protecting public health and the environment. This operations, maintenance, and monitoring plan provides a brief description of the measures necessary to operate, monitor and maintain the mechanical components of the remedy selected for the site. Inspection and routine maintenance notes will be recorded in logbooks and forms (Attachment 1). Detailed reporting requirements are described in Section 5.

4.1 ENGINEERING CONTROLS MONITORING TEAM

The personnel responsible for implementing the Interim SMP are herein referred to as the EC Monitoring Team. The following individuals constitute the EC Monitoring Team:

- **Applicant.** The Applicant is responsible for implementing this plan.
- **Property Owner.** The representative of the property owner, 1299 First LLC, supports the implementation of this plan.
- **Building Manager.** The Applicant may designate, with approval of the Property Owner, the Building Manager to be responsible for the performance of routine system operation and maintenance and to communicate results of periodic inspections to the Oversight Consultant. Should the Building Manager not perform this role, it will be added to the responsibility of the Oversight Consultant.
- **Oversight Consultant.** The Oversight Consultant is responsible for overseeing the monitoring contained in this Interim SMP. The Oversight Consultant will work with the Applicant and the Property Owner to coordinate the continuous and periodic monitoring required by this Interim SMP. The Applicant has selected Integral as the Oversight Consultant.
- **Professional Engineer.** The Professional Engineer, holding a New York Professional Engineering License, or his trained designee can provide training, as needed, to the Property Owner or Building Manager on the implementation of this Interim SMP. The Professional Engineer should be consulted to provide direction in determining the course of action that should be followed in the event that EC performance is found to be out of compliance with design specifications. Integral and the Applicant have selected Keith P. Brodock, P.E. (NY PE #089004) as the Professional Engineer on this project.

Any staffing changes to the EC Monitoring Team shall be brought to the attention of the Oversight Consultant (including the Professional Engineer) and the Applicant to ensure adequate training and execution of tasks/responsibilities, as set forth in this Interim SMP.

The steps for monitoring, operating, and maintaining the ECs are provided in the following sections. Annual follow-up training of the EC Monitoring Team will be provided under the supervision of the Professional Engineer responsible for preparation of the annual inspection report.

4.2 VAPOR BARRIER

The basement slab was sealed with Retro-Coat vapor intrusion coating to remove air flow pathways. The following routine maintenance tasks for the vapor barrier will be performed on a monthly basis or after a severe condition (defined as major erosion or flooding):

- Inspect the lowest level floor slab for evidence of cracks.
- Log the information in the logbook and monthly inspection form.
- In the event of a change from previous conditions, note in logbook and monthly inspection form, and immediately request an inspection from the Oversight Consultant. The Oversight Consultant will perform a follow-up inspection to investigate the changed condition and a copy of the findings and recommendations will be provided. Oversight Consultant report will include a mark-up of the property (Figure 1) with the locations, orientations, and size of the cracks. Copies of all inspections and correspondence must be maintained with the Interim SMP.

In the event that cracks are identified, the Applicant will retain the services of the certified vapor barrier installer and associated contractor(s) to perform any required repairs. Manufacturers' information for the Retro-Coat vapor barrier is provided in Attachment 2.

4.3 SSDS

The following tasks shall be performed during the periodic monitoring events:

- Monitor SSDS fan operation through a visual inspection of the U-tube manometer;
- Inspect the roof top piping, basement flooring, suction fan, and accessories for evidence of damage; and
- Measure the pressure of the SSDS at the six VMPs to confirm that there is greater than 0.004 inches of water column differential pressure across the slab.

During each periodic monitoring event, the EC Monitoring Team will document their findings on an SSDS Monitoring Form (Attachment 1).

4.3.1.1 SSDS Fan Operation Monitoring

A U-tube manometer was installed on the SSDS pressure relief riser pipe, near the header pipe. This manometer provides a visual indication that the SSDS fan is operating and also helps evaluate system performance by comparing pressure relief point pressures to VMP pressures. The Building Manager will be responsible to inspect the U-tube manometer at a minimum of once monthly and note findings in the logbook.

4.3.1.2 SSDS Component Monitoring

Routine maintenance activities for SSDS components will be performed at a minimum of once per quarter. The rooftop piping (riser pipes) will be evaluated for holes, cracks, or other physical deficiencies. The pipes will be checked for blockages. Basement and sub-basement flooring will be checked for holes, cracks, or other deficiencies. Sump pits will be monitored for debris or obstructions via pressure readings. Operation of suction fans will be evaluated for unusual noise or vibrations. Accessories will also be monitored for operation.

4.3.1.3 SSDS Fan Maintenance

The SSDS fan (Radonaway RP265) requires routine maintenance to maintain efficient operations. The following tasks shall be performed by the Building Manager as required and at a minimum of once a year:

1. Disconnect, lock out and tag fan electrical power source.
2. Clean inlet, outlet, and fan.
3. Inspect fan mounting.

Manufacturers' information for the SSDS fan is provided in Attachment 3.

4.3.1.4 Vacuum Influence Monitoring

Six VMPs were installed and will be used to monitor sub-slab differential pressure. The VMPs are located at various locations throughout the buildings, in locations that do not interfere with the current tenant usage of the building (see As-Built SSDS Drawings, Figure 1). Manual differential pressure measurements will be collected by connecting a digital micromanometer to the vapor monitoring points installed throughout the building.

Vacuum pressure on all six VMPs will be monitored annually. In the event that vacuum influence is less than 0.004 inches of water column differential pressure across the slab, (readings greater than -0.004 relative to zero above the slab), the EC Monitoring Team, in consultation with the Professional Engineer, will immediately inspect and investigate the source

of the problem and make appropriate arrangements to achieve vacuum influence of greater than 0.004 inches of water column differential pressure across the slab.

System Start-up and Testing

Manual differential pressure measurements were collected three times in the first month following SSDS installation. Measurements were collected by connecting a digital micromanometer to the VMPs installed throughout the basement. Differential pressure readings at or above 0.004 inches of water column (in WC) are considered acceptable.

Table 2. SSDS Differential Pressure Measurements

Location	Differential Pressure (in WC)		
	3/31/2016	4/14/2016	4/28/2016
VMP1	-0.023	-0.027	-0.024
VMP2	-0.055	-0.059	-0.056
VMP3	-0.042	-0.042	-0.042
VMP4	-0.021	-0.022	-0.023
VMP5	-0.010	-0.007	-0.005
VMP6	-0.011	-0.011	-0.005
VMP7	-0.010	-0.007	-0.004

Note: Negative readings indicate less pressure (i.e. more vacuum) below the slab.

Should the SSDS be shut down for an extended period of time, VMP testing at a frequency of three times in the first month would be required upon startup.

4.3.2 SSDS Non-Routine System Operation and Maintenance

The EC Monitoring Team, in consultation with the Professional Engineer, may consider the following corrective actions if system performance is found to be deficient: replacing the fan unit, adding a fan unit in parallel with the existing unit, or adding another suction point. If a specific system component fails, the component will be replaced with haste by the EC Monitoring Team. The EC Monitoring Team will make appropriate arrangements with suppliers to provide SSDS replacement parts (e.g. fan) within one week's notice.

4.4 EMERGENCY INSPECTIONS

Inspections will also be performed in the event of an emergency. If an emergency, such as a natural disaster or an unforeseen failure of any of the ECs occurs that reduces or has the potential to reduce the effectiveness of ECs in place at the site, verbal notice to the NYSDEC must be given by noon of the following day. In addition, an inspection of the site will be

conducted within 5 days of the event to verify the effectiveness of the IC/ECs implemented at the site by a qualified environmental professional, as determined by the NYSDEC. Written confirmation must be provided to the NYSDEC within 7 days of the event that includes a summary of actions taken, or to be taken, and the potential impact to the environment and the public.

5 REPORTING REQUIREMENTS

All site management inspection, maintenance and monitoring events will be recorded on either the property logbook or the appropriate site management forms provided in Attachment 1. The logbook and all pertinent records (which may be electronic) including, but not limited to, annual inspection reports, preventative maintenance logs, training logs, repairs and emergency work documentation must be maintained with the Interim SMP and readily accessible for inspection at the property. All applicable inspection forms and other records generated for the site during the reporting period will be provided in electronic format to the NYSDEC.

5.1 RECORDKEEPING

The pertinent members of the EC Monitoring Team must maintain logbooks in accordance with prescribed record keeping procedures in order to document continual monitoring and maintenance of the ECs. The logbook must contain, for each entry, as applicable, the following information:

- Inspector's Name & Title
- Date/Time of Inspection
- Description of the Inspection (e.g. floor inspection, fan inspection)
- Observations of the Inspected Area
- Recommendations
- Action Taken/Problem Corrected (Date, by whom)
- Inspector's Signature

All site inspections must be recorded in the logbook. Inspection forms are provided in Attachment 1.

5.2 ANNUAL INSPECTION REPORT

The Professional Engineer will be responsible for the preparation of an annual inspection report. The report will be organized as follows:

- Introduction – presenting a description of the property and the purpose of the report

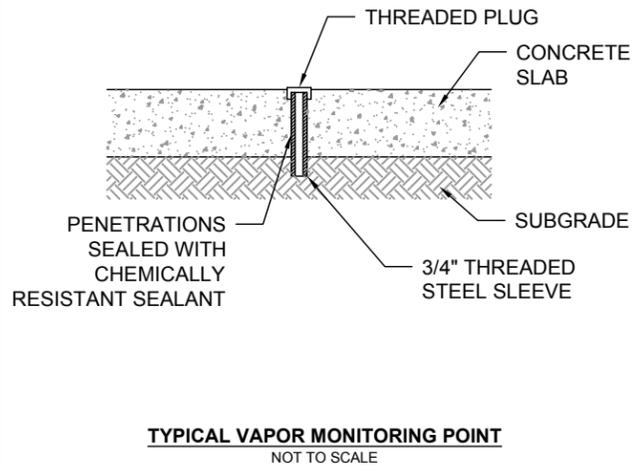
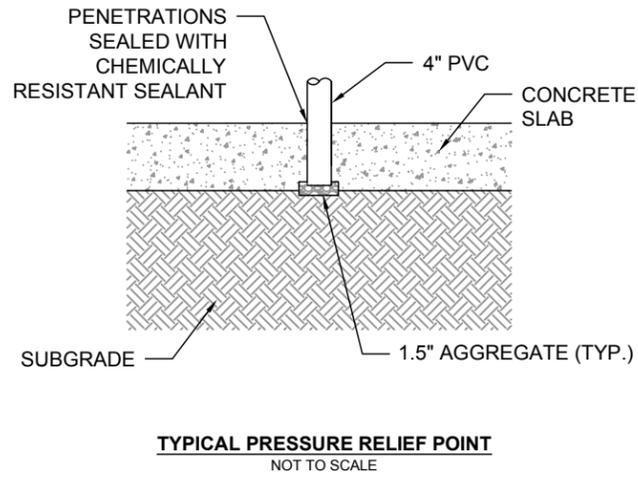
- Engineering Controls – presenting a summary of the ECs installed at the property, what modifications or enhancements to the ECs were made, if any, and an evaluation of the ECs and monitoring plan.
- Site Inspections and IRM Repairs – presenting a summary of the information included in the logbook and inspection reports, as well as a discussion of any repairs made to the ECs.
- Conclusions and Recommendations
- Signature and Seal of Professional Engineer to certify compliance with this Interim SMP
- Appendices:
 - Copies of inspection reports
 - Copies of logbook entries
 - Copies of any emergency work documentation
 - Training log with attendance sheet and appropriate signatures of the EC team

The annual inspection report will be submitted, in electronic format, to the NYSDEC Central Office, Regional Office in which the site is located and the NYSDOH Bureau of Environmental Exposure Investigation. The annual inspection report may need to be submitted in hard-copy format, if requested by the NYSDEC project manager.

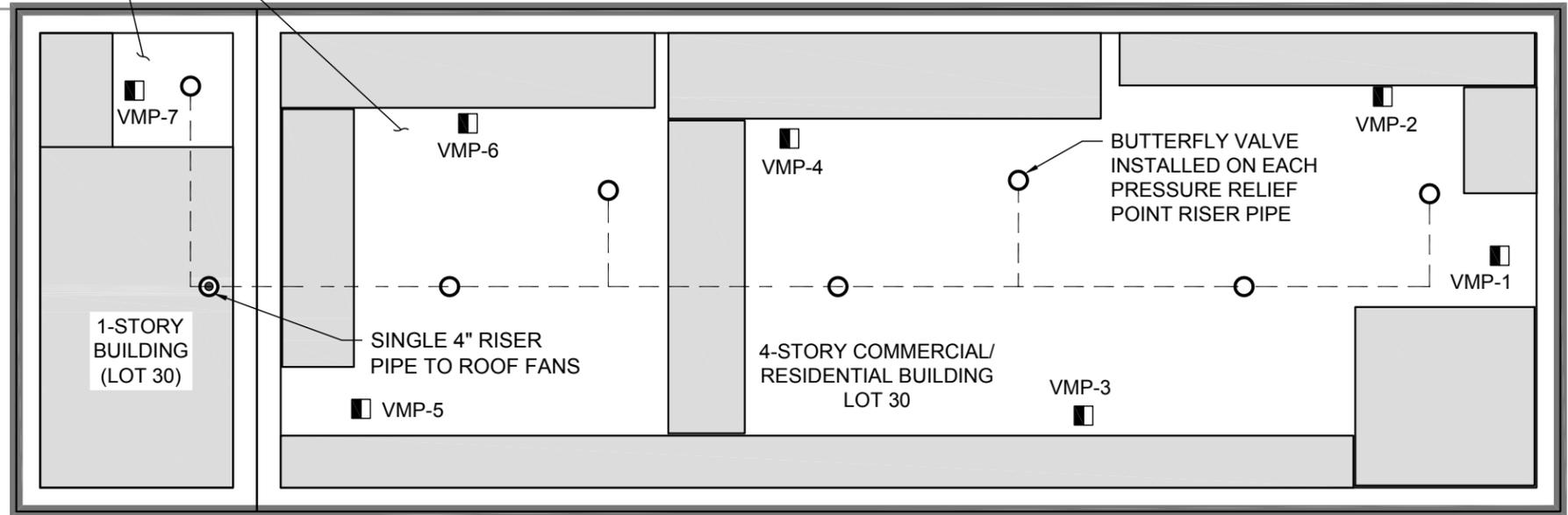
FIGURE 1

AS-BUILT DRAWING

P:\Projects\ED41_3SK_3SKCorp\CAD\Production Drawings\CCRI\Figure_1_SSDS_layout.dwg 7/11/2016 9:31:36 AM



RETRO-COAT VAPOR BARRIER APPLIED TO BASEMENT FLOOR

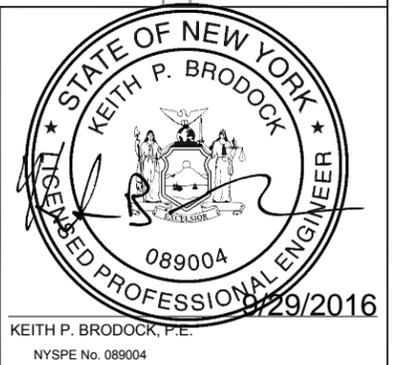


LEGEND:

- PERMANENT SHELVING AND OTHER OBSTRUCTIONS
- SITE BOUNDARY
- 4" PRESSURE RELIEF POINT AND PVC RISER
- VMP
- 4" RISER PIPE TO ROOF
- 4" HEADER PIPE

NOTES:

1. THE SSDS USES A RADONAWAY RP265 FAN.
2. THE SSDS FAN WILL OPERATE CONTINUOUSLY.
3. ALL SLAB PENETRATIONS ARE SEALED WITH GRACE BIUTHENE LIQUID MEMBRANE.
4. A U-TUBE MANOMETER WAS INSTALLED ON ONE PRESSURE RELIEF POINT RISER PIPE TO MEASURE SYSTEM PRESSURE.
5. WORK WAS DONE IN ACCORDANCE WITH ALL FEDERAL, STATE, AND LOCAL LAWS, REGULATIONS, AND GUIDANCE.
6. INTERIOR PIPE IS IDENTIFIED BY THE WORDS "SOIL VENT PIPE - DO NOT DISCONNECT"
7. ALL HORIZONTAL PIPE IS PITCHED A MINIMUM OF 1/8-INCH PER FOOT TOWARD THE PRESSURE RELIEF POINT.
8. ONE BUTTERFLY VALVE WAS INSTALLED ON EACH PRESSURE RELIEF POINT RISER PIPE.



IT IS A VIOLATION OF THE NEW YORK STATE EDUCATION LAW FOR ANY PERSON TO ALTER ANY DOCUMENT THAT BEARS THE SEAL OF A PROFESSIONAL ENGINEER, UNLESS THE PERSON IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER.



Figure 1.
Sub-Slab Depressurization System (SSDS) As-Built Drawing
1299 1st Avenue
New York, New York

ATTACHMENT 1

MONITORING FORMS

ENGINEERING CONTROLS CERTIFICATION FORM

Box 1

SITE DETAILS

SITE NAME **Former Nu Brite Cleaners**
SITE ADDRESS: 1299 1st Avenue
CITY/TOWN: New York
COUNTY: New York
ZIP CODE: 10021
CURRENT USE: Mixed Commercial/Residential

Box 2

VERIFICATION OF SITE DETAILS

YES NO N/A

1. Are the SITE DETAILS above correct?

If NO, are changes handwritten above or included on a separate sheet?

2. Have any federal, state, and/or local permits (e.g., building, discharge) been issued for or at the property since the initial/last certification?

If YES, is documentation included with this certification?

Box 3

DESCRIPTION OF ENGINEERING CONTROLS (ECs)

1. **Vapor Barrier:** The vapor barrier for this site consists of a Retro-Coat barrier installed on top of the building slab. The function of the vapor barrier is to effectively isolate the building from the subsurface beneath the building and limit soil vapor from entering the building from any current off-site sources.

2. **Active Sub-Slab Depressurization System (SSDS):** The SSDS consists of six pressure relief points installed beneath the building slab of the building, which are connected to a roof top Radonaway RP265 fan. The function of the SSDS is to create a downward pressure differential between above slab and below slab air.

CONTROL INSPECTION RESULTS

1. Vapor Barrier Inspection

YES NO N/A

- a. Review all cracks and openings in the vapor barrier (or walls and flooring if vapor barrier is not directly visible) identified in previous investigations, if applicable. Have these cracks lengthened, or is there any other evidence of a potential leak?
- b. During the building inspection, were any new cracks or openings observed in the lowest level floor?
- c. If YES to either of the above questions, is a map attached showing crack length, description, and approximate location?

2. SSDS Inspection

Vapor Monitoring Point	Pressure (inches H ₂ O)
VMP-1	
VMP-2	
VMP-3	
VMP-4	
VMP-5	
VMP-6	

Negative value indicated lower pressure below slab.

- a. Inspect the fan stack and check for apparent operation of the fans. Record vapor monitoring point pressures and system operational data in the above table. Does the SSDS appear to be operating as designed?

YES NO N/A

Box 5

CONTROL CERTIFICATION STATEMENTS

1. I certify by checking "YES" below that:
- a. This annual Engineering Control Certification Form and any 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 complete.

YES NO N/A

2. For each Engineering Control listed in Box 3, I certify by checking "YES" below that all of the following statements are true:

- a. The Engineering Control(s) continue to perform as designed; and
- b. The Engineering Control(s) continue to be protective of human health and the environment.

YES NO N/A

3. If the site has an Operations & Maintenance Plan (OMP), I certify by checking "YES" below that the OMP requirements are being met.

YES NO N/A

Box 6

PROFESSIONAL STAMP & SIGNATURE

I, _____ (print name), of _____ (print business), certify that all of the information and statements in the above boxes are correct.

Signature of Professional Engineer

Stamp

Date

Monthly Inspection Form - Vapor Barrier & SSDS

Inspector's Name:

Title:

Inspection Date/Time:

Purpose: (circle one)

Monthly Inspection

Severe Condition Inspection

		Yes / No *	Notified Person / Date
A. VAPOR BARRIER INSPECTION	1. Walk the entire first floor		
	* Any visible cracks in the first floor?		
	* Any other visible openings (unintended) in the floors?		
	* Any visible cracks or openings in elevator and sump pits?		
	* Any construction activities in affecting foundation/first floor?		
	** Include the following information: - Draw approximate location of floor and/or wall cracks/openings on site map. - Note the length of the crack/opening. Note the width of the crack/opening.		
B. SSDS INSPECTION	1. Walk the entire roof surface.		
	* Any rust or other debris (bird nest, etc.) in or on SSDS Vent Stack(s)?		
	* Are any rain caps missing on Vent Stack(s)?		
	2. Inspect all monitoring points.		
	* Are monitoring points accessible and are the covers intact and secured?		
	3. Inspect Fans		
	* Is there any unusual noise/vibration? (specify Fan No.)		
4. Check Alarm Circuit*			
Inspector's Signature:			

ATTACHMENT 2

VAPOR BARRIER MANUFACTURER'S INFORMATION

Vapor Intrusion Coating System for Existing Structures

Product Description

The **Retro-Coat™ (patent pending)** Vapor Intrusion Coating System is a complete product line that consists of chemically resistant materials to properly protect existing structures from the threat of contaminant vapor intrusion without the need for additional concrete protection. Developed by the R&D team of Land Science Technologies™, the Retro-Coat system has been subjected to rigorous testing procedures to prove its ability to combat the most aggressive chemical vapors. The main component of the Retro-Coat system is the **Retro-Coat** coating which is a two part, odorless, no VOC, 100% solids coating.

Retro-Coat finishes to a high gloss, easy-to-clean surface that is impervious to vapor and moisture transmission. Available in a variety of colors, **Retro-Coat** can be applied on damp as well as dry concrete, concrete masonry units, tile, brick and metal. For enhanced slip resistance, a suitable aggregate can be added. In addition, other additives or materials can be utilized to achieve a desired performance or aesthetic look.

Typical Application

Retro-Coat is suitable as a barrier to block contaminated vapors from entering existing structures. Particular uses include coating the horizontal surfaces of existing structures where contamination under, or adjacent to, a structure can potentially migrate inside the structure and create a vapor encroachment condition. This condition is most commonly found when the existing structure was operated as a dry cleaner, gas station, manufacturing facility or located in close proximity to any structure where carcinogenic chemicals were utilized.

A typical application consists of a minimum 20 mil thick system; consisting of two 10 mil coats of **Retro-Coat** at 160 SF/gallon per coat and is recommended along with a 6 mil coat of **Retro-Coat PRIMER**. The typical 20 mil application can withstand forklift traffic, other machinery and even act as secondary containment. However, if **Retro-Coat** may be exposed to more harsh conditions over a longer period of time, thicker applications ranging from 60 mil to ¼ -inch may be more suitable.

In either application, **Retro-Coat** is a traffic bearing surface and does not need a protective course placed over it.

Retro-Coat Advantages

- ***Our R&D team developed all of the Retro-Coat system components specifically for vapor intrusion protection in existing structures***
- ***Retro-Coat is resistant to both TCE and PCE, the vast majority of coatings cringe at such aggressive chemicals***
- ***Retro-Coat is a wearing surface, meaning no additional concrete protection is necessary***
- ***No odor and fast cure time reduce building downtime***
- ***Carpet, tile, linoleum or other floor coverings can be applied directly over Retro-Coat, if desired***
- ***Eliminates the need to remove the existing slab and when combined with in-situ treatment, lowers overall remediation cost***
- ***Retro-Coat can increase the performance of an existing active sub-slab depressurization system***
- ***Retro-Coat can aid in the retiring of existing active systems***
- ***Available and installed by Land Science Technologies certified contractors***



Completed surface preparation consisting of shot blasting, Retro-Coat PREP to fill joints and cracks and a 6 mil application of Retro-Coat PRIMER



Application of Retro-Coat SEALANT to a 20 mil total thickness

Installation

Particular care must be taken to follow those instructions precisely to assure proper installation. These instructions pertain to a standard 20 mil application; please contact us if the desired application is different.

1. New concrete should be allowed to cure a minimum of 28 days and/or be checked with a rubber mat or plastic sheet to ensure adequate curing time has occurred.
2. All surfaces to be covered should be power washed, shot blasted, acid etched, scarified or sanded to present a clean, sound substrate to which to bond to. The prepared surface should have a ph of 7.
3. Any bugholes and cracks wider than 1/8" should be filled with **Retro-Coat PREP** and allowed to dry before coating. More severely damaged concrete or other special conditions will require the proper **Retro-Coat** product.
4. When installing the standard 20 mil application of **Retro-Coat**, apply a 6 mil coat of **Retro-Coat PRIMER** and allow to dry prior to applying the initial coat of **Retro-Coat**. Priming may not be necessary when **Retro-Coat** is applied to a thickness greater than 20 mils. On new concrete or old concrete with an open porosity and on wood surfaces apply **Retro-Coat PRIMER** and allow to dry.
5. The two **Retro-Coat** ingredients should be mixed in the prescribed ratios, using a low speed "jiffy-style" mixer, (maximum 750 rpm). Mix Part A for about 1 minute then, add Part B and mix until uniform in color and consistency (at least one additional minute.)
6. Do not mix less than the prescribed amount of any ingredient or add any solvent to the mix.
7. Apply the mixed **Retro-Coat** material with a short nap roller, a squeegee or a brush. Apply approximately 160 SF per gallon per coat to achieve 10 mils of coating.
8. Apply a second coat while the first coat is still tacky if using spike shoes or dry enough to walk on, but before 7 hours at 75°F. If the first coat has set and is no longer tacky then the first coat should be sanded before recoating.
9. A suitable aggregate may be broadcast onto the surface after backrolling to provide more anti-slip profile to the finished surface. It is advisable to test various types and sizes of aggregate to achieve the desired finished profile.

Product Specification

The specified area shall receive an application of **Retro-Coat** as manufactured by **Land Science Technologies, San Clemente, California**. The material shall be installed by precisely following the manufacturer's published recommendations pertaining to surface preparation, mixing and application. The material shall be a low odor, two part, solvent free 100% solids, high gloss flexibilized system with good resilience to resist thermal and mechanical shock. It should be able to be roller applied at a minimum of 10 mils thickness per coat on vertical surfaces without sagging (at ambient conditions). The system must adhere to damp as well as dry concrete, wood, metal tile, terrazzo and sound existing epoxy and urethane coatings. It shall have tensile elongation of at least 6.0% when tested under ASTM-638. Its bond strength to quarry tile shall exceed 1000 psi when tested with an Elcometer pull test. Its hardness shall not exceed 83, as measured on the Shore D scale. The system shall be unaffected by oils and greases and shall withstand chemical attack for at least 72 hours against 98% sulfuric, 50% hydrofluoric acid, glacial acetic acid and acrylonitrile.

Precautions

1. This is a fast reacting product; immediately pour onto floor after mixing and spread with notched squeegee. Recoat window without sanding at 70°F: 8 hours
2. A severe skin and eye irritant; check MSDS before use
3. Do not apply below 50°F

Note: Failure to follow the above instruction, unless expressly authorized by a Land Science Technologies Representative, will void our material warranty.

Chemical Resistance

Retro-Coat™ is considered chemically resistant to neat concentrated acids, caustics and solvents. For permeation or diffusion coefficients please contact Land Science Technologies.

Physical Properties

Tensile Strength (ASTM D-638)	: 9800 psi	Bond Strength to Quarry Tile	: >1000 psi
Tensile Elongation (D-638)	: 6.0%	Vapor Transmission Rate (E-96)	: .027 perms
Flexural Strength (D-790)	: 7035 psi	Water Absorption (D-570)	: 0.2% in 24hrs.
Hardness, Shore D (D-2240)	: 83	Taber Abrasion (D-1044)	: 86 mg loss.
Gardner Impact Strength (D-2794)	: 80 in. lbs.	60° Gloss	: 100

Physical Characteristics

Density, lbs/gal.	Mixing Ratios	By Volume	By Weight	
Pt. A : 11.0	Pt. A : Pt. B	2:1	2.3:1	
Pt. B : 8.9				
A&B Mixed : 9.3	Curing Times @	50° F	77° F	90° F
Viscosity @ 77°F, cps	Pot Life	35 min.	30 min.	20 min.
Pt. A : 18,400	Working Times	20 min.	20 min.	15 min.
Pt. B : 500	Hard, Foot Traffic	14 hrs.	7 hrs.	3 ½ hrs.
A&B Mixed : 4800	Maximum hardness and chemical resistance are achieved after 7 days at 77°F			

Color Availability

Standard colors: beige, black, blue, dark gray, green, gray, red, white, yellow

Shelf Life: 1 Year at 77°F in unopened containers

Packaging and Coverage Rates (for 20 mil coverage)

4 Gallon Kit	:	320 SF
20 Gallon Kit	:	1600 SF
100 Gallon Kit	:	8,000 SF

The data, statements and recommendations set forth in this product information sheet are based on testing, research and other development work which has been carefully conducted by Land Science Technologies, and we believe such data, statements and recommendations will serve as reliable guidelines. However, this product is subject to numerable uses under varying conditions over which we have no control, and accordingly, we do NOT warrant that this product is suitable for any particular use. Users are advised to test the product in advance to make certain it is suitable for their particular production conditions and particular use or uses.

WARRANTY – All products manufactured by us are warranted to be first class material and free from defects in material and workmanship.

Liability under this warranty is limited to the net purchase price of any such products proven defective or, at our option, to the repair or replacement of said products upon their return to us transportation prepaid. All claims hereunder on defective products must be made in writing within 30 days after the receipt of such products in your plant and prior to further processing or combining with other materials and products. WE MAKE NO WARRANTY, EXPRESS OR IMPLIED, AS TO THE SUITABILITY OF ANY OF OUR PRODUCTS FOR ANY PARTICULAR USE, AND WE SHALL NOT BE SUBJECT TO LIABILITY FROM ANY DAMAGES RESULTING FROM THEIR USE IN OPERATIONS NOT UNDER OUR DIRECT CONTROL.

THIS WARRANTY IS EXCLUSIVE OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, AND NO REPRESENTATIVE OF OURS OR ANY OTHER PERSON IS AUTHORIZED TO ASSUME FOR US ANY OTHER LIABILITY IN CONNECTION WITH THE SALE OF OUR PRODUCTS.

Land Science Technologies Specifications for Retro-Coat™ Version 1.0

Part 1 – Scope

1.1 Product and Application

This specification describes the application of the Retro-Coat™ System. The minimum thickness of the system is between 25-30 mils, including a 20 mil minimum application of Retro-Coat.

1.2 Acceptable Manufacturers

- A. Retro-Coat as manufactured by Land Science Technologies San Clemente, CA.

1.3 Performance Criteria

- A. Retro-Coat as manufactured by Land Science Technologies San Clemente, CA.
 - 1. Diffusion Coefficient (Columbia Labs)
PCE: 7.6×10^{-14} m²/s
TCE: 8.2×10^{-14} m²/s
 - 2. Tensile Elongation (ASTM D-638)
Minimum: 6000 psi
 - 3. Tensile Elongation (ASTM D-638)
Minimum: 6 %
 - 4. Flexural Strength (ASTM D-790)
Minimum: 7000 psi
 - 5. Hardness, Shore D (ASTM D-2240)
Maximum: 85
 - 6. Gardner Impact (ASTM D-2794)
Minimum: 80 inch-pounds
 - 7. Bond Strength to Quarry Tile
Minimum: 1000 psi
 - 8. Vapor Transmission Rate (ASTM E-96)
Maximum: .07 perms
 - 9. Water Absorption (ASTM D-570)
Maximum: .02% in 24 hours
 - 10. 60° Gloss
Minimum: 100.

1.4 Materials

- A. Retro-Coat "A" shall be a modified epoxy containing special flexibilizers and specially formulated resins for superior chemical resistance and enhanced resilience. No solvents are allowed.
- B. Retro-Coat "B" shall be customized blend of hardeners specifically formulated to maximize chemical resistance. No solvents are allowed.

1.5 Applicator

- A. Applicator must be a certified contractor of Land Science Technologies.

Part 2 – Application

2.1 Surface Preparation

- A. All existing surfaces that will be covered with the systems specified herein should be mechanically ground, shot blasted or sand blasted to yield a minimum 60 grit surface texture. All loosely adhered coatings will be removed. Any grease and other contaminants found on the concrete must also be removed.
- B. All open cracks 1/2" and greater should be v-notched to a 3/4" width by 1/2" depth and cleaned of any debris. Such cracks should be filled with Retro-Coat Gel and struck off flush with the surrounding surface.
- C. Cut back and/or remove any expansion joint backing or filler strips to a minimum of 1 1/2" deep. Insert disposable filler in the joints to prevent filling with the overlayment materials and to allow for accurate location of final saw cuts in the overlayment.

2.2 Material Application

- A. Retro-Coat CAULK
 1. Apply Retro-Coat CAULK around the base of all pipe penetrations making sure to fill any gap between the penetration and concrete slab
 2. Apply Retro-Coat CAULK to the joint created between horizontal and vertical transitions. The caulking material should be applied and pressed into the joint filling any gaps that might be present.
- B. Retro-Coat PRIMER
 1. Apply Retro-Coat PRIMER to all areas at a thickness of 6 mil and allow to dry tack free. In areas where the concrete surface is in need of slight repair or needs to be leveled, a slurry form of Retro-Coat PRIMER called Retro-Coat PRIMER-S can be applied with a flat squeegee. Retro-Coat PRIMER-S is self priming and does not need to be primed again.
- C. Retro-Coat
 1. Mix Retro-Coat, Part A with a low-speed (<750 rpm) jiffy-style mixer for about 30 seconds, or until uniform in color, then mix in Retro-Coat Coating, Part B for another 30-60 seconds.
 2. Dump contents onto floor in a ribbon pattern, squeegee, and then back roll at a coverage rate of 160 SF/gallon to achieve a film thickness of 10 mils.
 3. Apply second coat 10 mil coat to achieve a total thickness of 20 mils. Repeat as necessary to achieve specified thickness.
 4. If a flooring material will be placed over Retro-Coat after it is applied, or appearance is not a priority, (1) 20 mil coat can be applied.

2.3 Protection of Finished Work

- A. Prohibit foot traffic on floor for 24 hours after laying (at 70°F). At 50°F, this time should be extended to 48 hours.
- B. Rinse off any chemicals that may come in contact within 7 days of installation with the freshly laid floor immediately.

2.4 Cleanup

- A. Properly dispose of all unused and waste materials.
- B. Tools can be washed in warm, soapy water when wet, but after drying, can only be cleaned by grinding or with a paint stripper.
- C. Unused resin can be set off with proper amount of hardener and disposed of in regular trash bins.

Part 3 – Quality Control

3.1 Warranty

- A. Installer shall provide a one year warranty against delamination, chemical attack and normal wear and tear.
- B. Manufacturer will provide a one year material warranty.

3.2 Quality Control

- A. Installer shall use a notched squeegee to apply Retro-Coat to the specified mil thickness and calculations shall be done to determine if the correct amount of material has been applied. Retro-Coat contains 100% solids at the time of application; therefore no material shrinkage will occur during the curing process. One gallon will cover 80 square feet.
- B. A wet mil film gauge can be used to spot check the Retro-Coat thickness to make certain the minimum 20 mil thickness has been applied, though some discretion should be used because high points or low points on the underlying surface can adversely affect the thickness measurements.

3.3 Floor Care

- A. The standard smooth surface of Retro-Coat should be cleaned on a regular basis by damp mopping the floor with conventional commercial cleaners. It is important to first remove any grease or oils by a suitable cleaner, preferably a citrus based cleaner. Rinse with clear water to help eliminate film buildup and then allow to dry. Never use abrasive powder cleaners like Ajax or Comet as they tend to scratch the floor.
- B. Additional steps can also be taken to prolong the look and life of a seamless floor:
 - 1. Protect the floor during transference of heavy equipment
 - 2. Educate the drivers inside the building the importance of avoiding "jack-rabbit" starts and stops, as well as keeping the metal forks lifted
 - 3. Regular cleaning should take place as to not allow the buildup of abrasive material, such as sand or dirt, on the coating
 - 4. Eliminate all metal wheels
 - 5. Change over to light-colored polyurethane wheels
 - 6. Do not slide heavy metal totes, drums or bins across the floor
 - 7. Immediately hose down chemical spills, especially on newly laid floors.

ATTACHMENT 3

SSDS FAN MANUFACTURER'S INFORMATION



RP Series

Radon Mitigation Fan

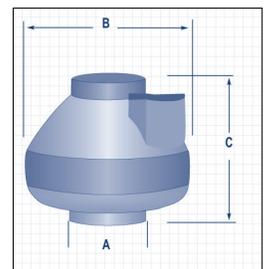
All RadonAway® fans are specifically designed for radon mitigation. RP Series Fans provide superb performance, run ultra-quiet and are attractive. They are ideal for most sub-slab radon mitigation systems.

Features

- Energy efficient
- Ultra-quiet operation
- Meets all electrical code requirements
- Water-hardened motorized impeller
- Seams sealed to inhibit radon leakage (RP140 & RP145 double snap sealed)
- ETL Listed - for indoor or outdoor use
- Thermally protected motor
- Rated for commercial and residential use



MODEL	P/N	FAN DUCT DIAMETER	WATTS	MAX. PRESSURE"WC	TYPICAL CFM vs. STATIC PRESSURE WC				
					0"	.5"	1.0"	1.5"	2.0"
RP140*	23029-1	4"	15-21	0.8	135	70	-	-	-
RP145	23030-1	4"	41-72	2.1	166	126	82	41	3
RP260	23032-1	6"	50-75	1.6	272	176	89	13	-
RP265	23033-1	6"	91-129	2.3	334	247	176	116	52
RP380	28208	8"	95-152	2.3	497	353	220	130	38



 Made in USA with US and imported parts

 ETL Listed Intertek

 All RadonAway inline radon fans are covered by our 5-year, hassle-free warranty

 *Energy Star® Rated

Model	A	B	C
RP140	4.5"	9.7"	8.5"
RP145	4.5"	9.7"	8.5"
RP260	6"	11.75"	8.6"
RP265	6"	11.75"	8.6"
RP380	8"	13.41"	10.53"

For Further Information Contact



The World's Leading
Radon Fan Manufacturer



RP Series

Installation & Operating Instructions

RadonAway

3 Saber Way | Ward Hill, MA 01835

www.radonaway.com



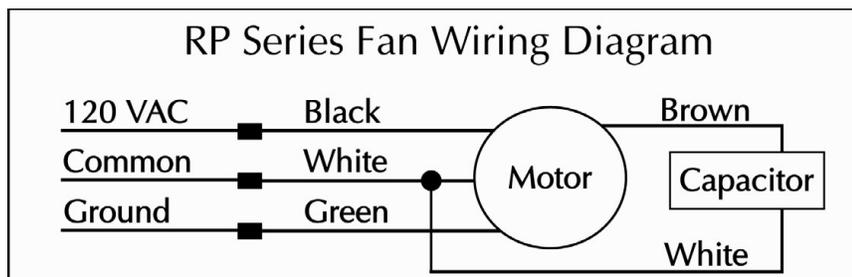
RadonAway Ward Hill, MA.

Series Fan Installation & Operating Instructions

Please Read and Save These Instructions.

DO NOT CONNECT POWER SUPPLY UNTIL FAN IS COMPLETELY INSTALLED. MAKE SURE ELECTRICAL SERVICE TO FAN IS LOCKED IN "OFF" POSITION. DISCONNECT POWER BEFORE SERVICING FAN.

- WARNING!** WARNING! For General Ventilating Use Only. Do Not Use to Exhaust Hazardous, Corrosive or Explosive Materials, Gases or Vapors. See Vapor Intrusion Application Note #AN001 for important information on VI applications. RadonAway.com/vapor-intrusion
- WARNING!** NOTE: Fan is suitable for use with solid state speed controls however use of speed controls is not generally recommended.
- WARNING!** Check voltage at the fan to insure it corresponds with nameplate.
- WARNING!** Normal operation of this device may affect the combustion airflow needed for safe operation of fuel burning equipment. Check for possible backdraft conditions on all combustion devices after installation.
- NOTICE!** There are no user serviceable parts located inside the fan unit.
Do NOT attempt to open. Return unit to the factory for service.
- WARNING!** Do not leave fan unit installed on system piping without electrical power for more than 48 hours. Fan failure could result from this non-operational storage.
- WARNING! TO REDUCE THE RISK OF FIRE, ELECTRIC SHOCK, OR INJURY TO PERSONS, OBSERVE THE FOLLOWING:**
 - Use this unit only in the manner intended by the manufacturer. If you have questions, contact the manufacturer.
 - Before servicing or cleaning unit, switch power off at service panel and lock the service disconnecting means to prevent power from being switched on accidentally. When the service disconnecting means cannot be locked, securely fasten a prominent warning device, such as a tag, to the service panel.
 - Installation work and electrical wiring must be done by qualified person(s) in accordance with all applicable codes and standards, including fire rated construction.
 - Sufficient air is needed for proper combustion and exhausting of gases through the flue (chimney) of fuel burning equipment to prevent back drafting. Follow the heating equipment manufacturers guideline and safety standards such as those published by the National Fire Protection Association, and the American Society for Heating, Refrigeration and Air Conditioning Engineers (ASHRAE), and the local code authorities.
 - When cutting or drilling into a wall or ceiling, do not damage electrical wiring and other hidden utilities.
 - Ducted fans must always be vented to outdoors.
 - If this unit is to be installed over a tub or shower, it must be marked as appropriate for the application and be connected to a GFCI (Ground Fault Circuit Interrupter) - protected branch circuit.





RP Series

RP140	p/n 23029-1
RP145	p/n 23030-1
RP260	p/n 23032-1
RP265	p/n 23033-1
RP380	p/n 28208

1.0 SYSTEM DESIGN CONSIDERATIONS

1.1. INTRODUCTION

The RP Series Radon Fans are intended for use by trained, professional, certified/licensed Radon mitigators. The purpose of this instruction is to provide additional guidance for the most effective use of an RP Series Fan. This instruction should be considered as a supplement to EPA/radon industry standard practices, state and local building codes and state regulations. In the event of a conflict, those codes, practices and regulations take precedence over this instruction.

1.2. FAN SEALING

The RP Series Fans are factory sealed, no additional caulk or other materials are required to inhibit air leakage.

1.3. ENVIRONMENTALS

The RP Series Fans are designed to perform year-round in all but the harshest climates without additional concern for temperature or weather. For installations in an area of severe cold weather, please contact RadonAway for assistance. When not in operation, the fan should be stored in an area where the temperature is never less than 32 degrees F. or more than 100 degrees F.

1.4. ACOUSTICS

The RP Series Fan, when installed properly, operates with little or no noticeable noise to the building occupants. The velocity of the outgoing air should be considered in the overall system design. In some cases the "rushing" sound of the outlet air may be disturbing. In these instances, the use of a RadonAway Exhaust Muffler is recommended.

(To ensure quiet operation of ENERGY STAR qualified in-line and remote fans, each fan shall be installed using sound attenuation techniques appropriate for the installation. For bathroom and general ventilation applications, at least 8 feet of insulated flexible duct shall be installed between the exhaust or supply grille(s) and the fan). RP Series fans are not suitable for kitchen range hood remote ventilation applications.

1.5. GROUND WATER

In the event that a temporary high water table results in water at or above slab level, water may be drawn into the riser pipes thus blocking air flow to the RP Series Fan. The lack of cooling air may result in the fan cycling on and off as the internal temperature rises above the thermal cutoff and falls upon shutoff. Should this condition arise, it is recommended that the fan be turned off until the water recedes allowing for return to normal operation.

1.6. SLAB COVERAGE

The RP Series Fan can provide coverage up to 2000+ sq. ft. per slab penetration. This will primarily depend on the sub-slab material in any particular installation. In general, the tighter the material, the smaller the area covered per penetration. Appropriate selection of the RP Series Fan best suited for the sub-slab material can improve the slab coverage. The RP140/145/155 are best suited for general purpose use. The RP260 can be used where additional airflow is required and the RP265/380 is best suited for large slab, high airflow applications. Additional suction points can be added as required. It is recommended that a small pit (5 to 10 gallons in size) be created below the slab at each suction hole.

1.7. CONDENSATION & DRAINAGE

Condensation is formed in the piping of a mitigation system when the air in the piping is chilled below its dew point. This can occur at points where the system piping goes through unheated space such as an attic, garage or outside. The system design must provide a means for water to drain back to a slab hole to remove the condensation. The RP Series Fan **MUST** be mounted vertically plumb and level, with the outlet pointing up for proper drainage through the fan. Avoid mounting the fan in any orientation that will allow water to accumulate inside the fan housing. The RP Series Fans are **NOT** suitable for underground burial.

For RP Series Fan piping, the following table provides the minimum recommended pipe diameter and pitch under several system conditions.

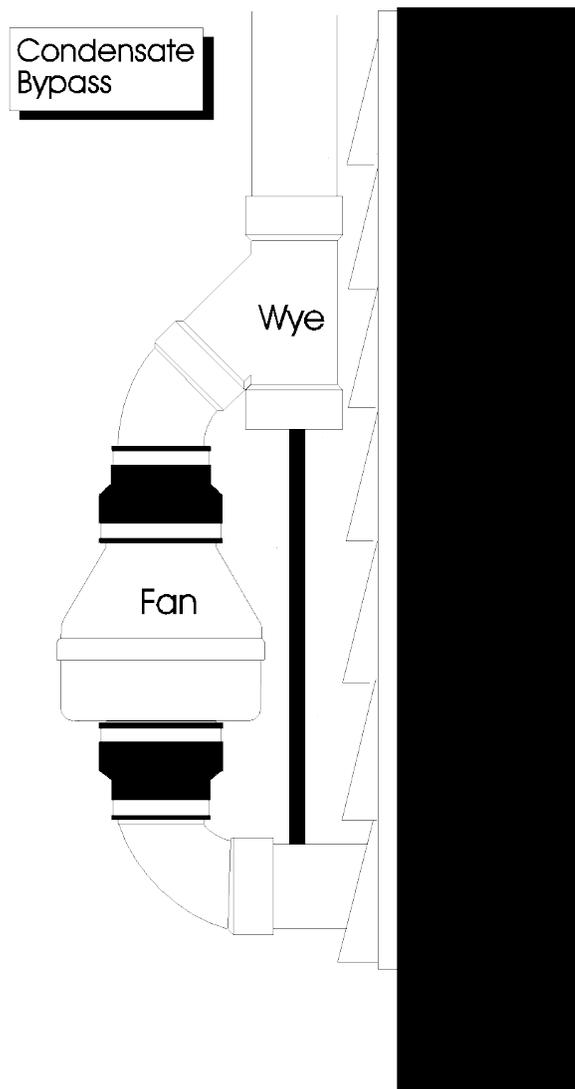
Pipe Dia.	Minimum Rise per Ft of Run*				
	@25 CFM	@50 CFM	@100 CFM	@200 CFM	@300 CFM
6"	-	3/16	1/4	3/8	3/4
4"	1/8	1/4	3/8	2 3/8	-
3"	1/4	3/8	1 1/2	-	-



*Typical RP1xx/2xx Series Fan operational flow rate is 25 - 90 CFM on 3" and 4" pipe. (For more precision, determine flow rate by measuring Static Pressure, in WC, and correlate pressure to flow in the performance chart in the addendum.)

Under some circumstances in an outdoor installation a condensate bypass should be installed in the outlet ducting as shown. This may be particularly true in cold climate installations which require long lengths of outlet ducting or where the outlet ducting is likely to produce large amounts of condensation because of high soil moisture or outlet duct material. Schedule 20 piping and other thin-walled plastic ducting and Aluminum downspout will normally produce much more condensation than Schedule 40 piping. Schedule 40 piping is preferred for radon mitigation, all joints should be fully sealed using the appropriate pipe cement on socket type fittings or flexible coupling firmly attached via worm drive screw clamps. Sealing ducting or pipe with duct tape is not acceptable on radon mitigation installations. No pipe penetrations are permitted, other than the condensation bypass. Silicon caulk is permitted for sealing purposes.

The bypass is constructed with a 45 degree Wye fitting at the bottom of the outlet stack. The bottom of the Wye is capped and fitted with a tube that connects to the inlet piping or other drain. The condensation produced in the outlet stack is collected in the Wye fitting and drained through the bypass tube. The bypass tubing may be insulated to prevent freezing.



1.8. SYSTEM MONITOR & LABEL

A System Monitor, such as a manometer (P/N 50017) or audible alarm (P/N 28001-2) is required to notify the occupants of a fan system malfunction. A System Label (provided with Manometer P/N 50017) with instructions for contacting the installing contractor for service and also identifying the necessity for regular radon tests to be conducted by the building occupants, must be conspicuously placed where the occupants frequent and can see the label.

1.9. VENTILATION

If used as a ventilation Fan any type of ducting is acceptable, however, flexible nonmetallic ducting is recommended for easy installation and quieter operation. Insulated flexible ducting is highly recommended in cold climates to prevent the warm bathroom air from forming condensation in the ducting where it is exposed to colder attic air. The outlet of the fan should always be ducted to the outside. Avoid venting the outlet of the fan directly into an attic area. The excess moisture from the bathroom can cause damage to building structure and any items stored in the attic. Multiple venting points may be connected together using a "T" or "Y" fitting. Ideally Duct should be arranged such that equal duct lengths are used between intake and "T" or "Y" fitting, this will result in equal flow rates in each intake branch. If adjustable intake grilles are used on multi-intake systems then the opening on each grill should be equal in order to minimize noise and resistance. Straight smooth runs of rigid metal ducting will present the least resistance and maximize system performance. The Equivalent Length of Rigid Metal Ducting resulting in .2" WC pressure loss for each Fan Model is provided in the specification section of these Instructions. Flexible ducting, if used, must always be as close to being fully extended as possible. Formed rigid metal duct elbows will present the least resistance and maximize system performance, recommended bend radius of elbow is at least 1.5 x duct diameter.

RP Series fans are not suitable for kitchen range hood remote ventilation applications. For quietest performance, the fan should be mounted further away from the inlet duct, near the outside vent. A minimum distance of 8 feet is recommended between the fan or T/Y of a multi-intake system and intake grille(s).

Backdraft dampers allow airflow in only one direction preventing cold/hot drafts from entering the vented area and minimize possible condensation and icing within the system while the fan is not operating. Backdraft dampers are highly recommended at each intake grille for bathroom ventilation in all cold climate installations. Installation instructions are included with Spruce backdraft dampers.

The ducting from this fan to the outside of the building has a strong effect on the airflow, noise and energy use of the fan. Use the shortest, straightest duct routing possible for best performance, and avoid installing the fan with smaller ducts than recommended. Insulation around the ducts can reduce energy loss and inhibit mold growth. Fans installed with existing ducts may not achieve their rated airflow.

1.10. ELECTRICAL WIRING

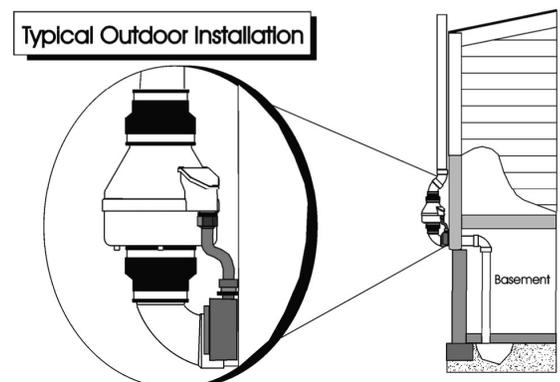
The RP Series Fans operate on standard 120V 60 Hz. AC. All wiring must be performed in accordance with the National Fire Protection Association's (NFPA) National Electrical Code, Standard #70-current edition for all commercial and industrial work, and state and local building codes. All wiring must be performed by a qualified and licensed electrician. Outdoor installations require the use of a U.L. listed watertight conduit. Ensure that all exterior electrical boxes are outdoor rated and properly sealed to prevent water penetration into the box. A means, such as a weep hole, is recommended to drain the box.

1.11. SPEED CONTROLS

The RP Series Fans are rated for use with electronic speed controls, however, they are generally not recommended. If used, the recommended speed control is Pass & Seymour Solid State Speed Control Cat. No. 94601-I.

2.0 INSTALLATION

The RP Series Fan can be mounted indoors or outdoors. (It is suggested that EPA recommendations be followed in choosing the fan location.) The RP Series Fan may be mounted directly on the system piping or fastened to a supporting structure by means of optional mounting bracket



2.1 MOUNTING

Mount the RP Series Fan vertically with outlet up. Insure the unit is plumb and level. When mounting directly on the system piping assure that the fan does not contact any building surface to avoid vibration noise.

2.2 MOUNTING BRACKET (optional)

The RP Series Fan may be optionally secured with the RadonAway P/N 25007 (25033 for RP385) mounting bracket. Foam or rubber grommets may also be used between the bracket and mounting surface for vibration isolation.

2.3 SYSTEM PIPING

Complete piping run, using flexible couplings as means of disconnect for servicing the unit and vibration isolation. Used as a Radon Fan the fan is typically outside of the building thermal boundary, and is venting to the outside, installation of insulation around the fan is not required. If used as a ventilation fan insulation may be installed around the fan and duct work, insulation should be sized appropriately for the duct size used and secured with duct tape.

2.4 ELECTRICAL CONNECTION

Connect wiring with wire nuts provided, observing proper connections (See Section 1.10). Note that the fan is not intended for connection to rigid metal conduit.

Fan Wire	Connection
Green	Ground
Black	AC Hot
White	AC Common

2.5 VENT MUFFLER (optional)

Install the muffler assembly in the selected location in the outlet ducting. Solvent weld all connections. The muffler is normally installed at the end of the vent pipe.

2.6 OPERATION CHECKS & ANNUAL SYSTEM MAINTENANCE

_____ **Verify** all connections are tight and **leak-free**.

_____ **Insure** the RP Series Fan and all ducting is secure and vibration-free.

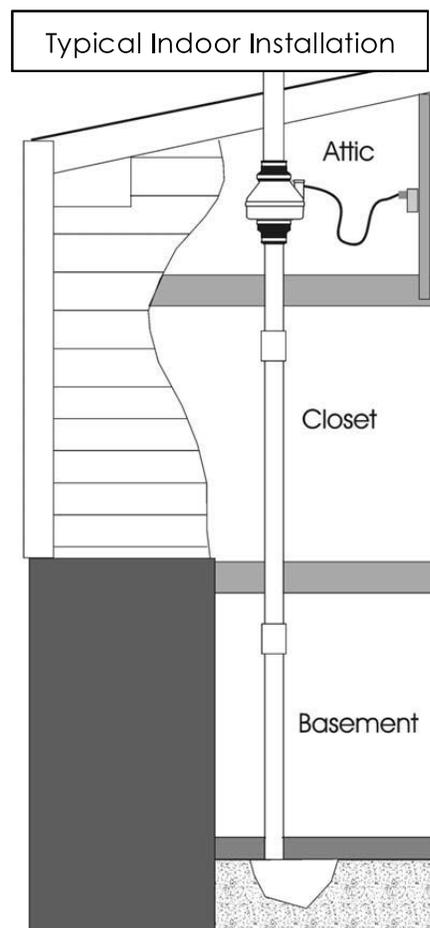
_____ **Verify** system vacuum pressure with manometer. **Insure** vacuum pressure is within normal operating range and **less than** the maximum recommended operating pressure.

(Based on sea-level operation, at higher altitudes reduce by about 4% per 1000 Feet.)

(Further reduce Maximum Operating Pressure by 10% for High Temperature environments)

See Product Specifications. If this is exceeded, increase the number of suction points.

_____ **Verify Radon levels by testing to EPA protocol.**



RP SERIES PRODUCT SPECIFICATIONS

The following chart shows fan performance for the RP Series Fan:

Typical CFM Vs Static Pressure "WC									
	0"	.25"	.5"	.75"	1.0"	1.25"	1.5"	1.75"	2.0"
RP140	135	103	70	14	-	-	-	-	-
RP145	166	146	126	104	82	61	41	21	3
RP260	272	220	176	138	103	57	13	-	-
RP265	334	291	247	210	176	142	116	87	52
RP380*	497	401	353	281	220	176	130	80	38

* Tested with 6" inlet and discharge pipe.

Power Consumption 120 VAC, 60Hz 1.5 Amp Maximum			Maximum Recommended Operating Pressure* (Sea Level Operation)**	
RP140	17 - 21	watts	RP140	0.8" W.C.
RP145	41 - 72	watts	RP145	1.7" W.C.
RP260	52 - 72	watts	RP260	1.5" W.C.
RP265	91 - 129	watts	RP265	2.2" W.C.
RP380	95 - 152	watts	RP380	2.0" W.C.

*Reduce by 10% for High Temperature Operation

**Reduce by 4% per 1000 feet of altitude

	Size	Weight	Inlet/Outlet	L.2
RP140	8.5H" x 9.7" Dia.	5.5 lbs.	4.5" OD (4.0" PVC Sched 40 size compatible)	25
RP145	8.5H" x 9.7" Dia.	5.5 lbs.	4.5" OD (4.0" PVC Sched 40 size compatible)	15
RP260	8.6H" x 11.75" Dia.	5.5 lbs.	6.0" OD	48
RP265	8.6H" x 11.75" Dia.	6.5 lbs.	6.0" OD	30
RP380	10.53H" x 13.41" Dia.	11.5 lbs.	8.0" OD	57

L.2 = Estimated Equivalent Length of Rigid Metal Ducting resulting in .2in WC pressure loss for Duct Size listed. Longer Equivalent Lengths can be accommodated at Flows Lower than that at .2in WC pressure loss (see CFM Vs Static Pressure "WC Table).

Recommended ducting: 3" or 4" RP1xx/2xx, 6" RP380, Schedule 20/40 PVC Pipe

Mounting: If used for Ventilation use 4", 6" or 8" Rigid or Flexible Ducting

Mount on the duct pipe or with optional mounting bracket.

Storage temperature range: 32 - 100 degrees F.

Normal operating temperature range: -20 - 120 degrees F.

Maximum inlet air temperature: 80 degrees F.

Continuous Duty

Class F Insulation [RP140 Class B]

Class B Insulation

Thermally Protected

3000 RPM

Rated for Indoor or Outdoor Use



Conforms to
UL STD. 507

Certified to
CAN/CSA STD.
C22.2 No.113



IMPORTANT INSTRUCTIONS TO INSTALLER

Inspect the GP/XP/XR/RP/SF Series Fan for shipping damage within 15 days of receipt. Notify **RadonAway® of any damages immediately**. RadonAway® is not responsible for damages incurred during shipping. However, for your benefit, RadonAway® does insure shipments.

There are no user serviceable parts inside the fan. **Do not attempt to open.** Return unit to factory for service.

Install the GP/XP/XR/RP/SF Series Fan in accordance with all EPA standard practices, and state and local building codes and state regulations.

Provide a copy of this instruction or comparable radon system and testing information to the building occupants after completing system installation.

WARRANTY

RadonAway® warrants that the GPX01/XP/XR/RP/SF Series Fan (the "Fan") will be free from defects in materials and workmanship for a period of 90 days from the date of purchase (the "Warranty Term").

RadonAway® will replace any Fan which fails due to defects in materials or workmanship during the Warranty Term. The Fan must be returned (at Owner's cost) to the RadonAway® factory. Any Fan returned to the factory will be discarded unless the Owner provides specific instructions along with the Fan when it is returned regardless of whether or not the Fan is actually replaced under this warranty. Proof of purchase must be supplied upon request for service under this Warranty.

This Warranty is contingent on installation of the Fan in accordance with the instructions provided. This Warranty does not apply where any repairs or alterations have been made or attempted by others, or if the unit has been abused or misused. Warranty does not cover damage in shipment unless the damage is due to the negligence of RadonAway®.

5 YEAR EXTENDED WARRANTY WITH PROFESSIONAL INSTALLATION.

RadonAway® will extend the Warranty Term of the fan to five (5) years from date of purchase or sixty-three (63) months from the date of manufacture, whichever is sooner, if the Fan is installed in a professionally designed and professionally installed active soil depressurization system or installed as a replacement fan in a professionally designed and professionally installed active soil depressurization system by a qualified installer. Proof of purchase and/or proof of professional installation may be required for service under this warranty. Outside the Continental United States and Canada the extended Warranty Term is limited to one (1) year from the date of manufacture.

RadonAway® is not responsible for installation, removal or delivery costs associated with this Warranty.

LIMITATION OF WARRANTY

EXCEPT AS STATED ABOVE, THE GPx01/XP/XR/RP SERIES FANS ARE PROVIDED WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING, WITHOUT LIMITATION, IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

IN NO EVENT SHALL RADONAWAY BE LIABLE FOR ANY DIRECT, INDIRECT, SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES ARISING OUT OF, OR RELATING TO, THE FAN OR THE PERFORMANCE THEREOF. RADONAWAY'S AGGREGATE LIABILITY HEREUNDER SHALL NOT IN ANY EVENT EXCEED THE AMOUNT OF THE PURCHASE PRICE OF SAID PRODUCT. THE SOLE AND EXCLUSIVE REMEDY UNDER THIS WARRANTY SHALL BE THE REPAIR OR REPLACEMENT OF THE PRODUCT, TO THE EXTENT THE SAME DOES NOT MEET WITH RADONAWAY'S WARRANTY AS PROVIDED ABOVE.

For service under this Warranty, contact RadonAway for a Return Material Authorization (RMA) number and shipping information. No returns can be accepted without an RMA. If factory return is required, the customer assumes all shipping costs, including insurance, to and from factory.

*RadonAway® 3 SaberWay
Ward Hill, MA 01835 USA TEL (978) 521-3703
FAX (978) 521-3964
Email to: Returns@RadonAway.com*

Record the following information for your records:

Serial No. _____
Purchase Date _____

ATTACHMENT 4

EXCAVATION WORK PLAN

EXCAVATION WORK PLAN

Former Nu Brite Cleaners

1299 1st Avenue

New York, New York 10021

NYSDEC BCP Number: C231072

Prepared for
3SK Corporation
27-15 27th Street
Astoria, NY 11102

Prepared by

61 Broadway
Suite 1601
New York, NY 10006

September 2016

1 NOTIFICATION

This Excavation Work Plan (EWP) is part of an Interim SMP; it may need to be updated along with the SMP once an overall site remedy is selected and implemented.

At least 15 days prior to the start of any activity that is anticipated to encounter remaining contamination, the party performing the work (e.g. site owner) will notify the NYSDEC. Table 1 includes contact information for the above notification. The information on this table will be updated as necessary to provide accurate contact information.

Table 1: Notifications*

Name	Role	Phone	Email
1299 First LLC	Property Owner	(212) 693-9000	ron@homestateproperties.com
James L'Esperance, P.E.	Oversight Consultant Representative	(424) 238-8299	jlesperance@integral-corp.com
Keith P. Brodock, P.E.	Professional Engineer	(212) 440-6702	kbrodock@integral-corp.com
Bryan Wong	NYSDEC Project Manager	(718) 482-4905	Yukylin.wong@dec.ny.gov
Stephanie Selmer	NYSDOH Project Manager	(518) 402-7860	Stephanie.selmer@health.ny.gov
Paul John	DER Regional Remediation Engineer	(718) 482-4966	Paul.john@dec.ny.gov
Jane O'Connell	DER Site Control	(718) 482-4599	Jane.oconnell@dec.ny.gov

* Note: Contact information and parties to notify are subject to change and will be updated as necessary.

This notification will include:

- A detailed description of the work to be performed, including the location and areal extent of excavation, plans/drawings for site re-grading, intrusive elements or utilities to be installed below the soil cover, estimated volume of contaminated soil to be excavated and any work that may impact an engineering control;
- A summary of environmental conditions anticipated to be encountered in the work areas, including the nature and concentration levels of contaminants of concern, potential presence of grossly contaminated media, and plans for any pre-construction sampling;
- A schedule for the work, detailing the start and completion of all intrusive work;

- A summary of the applicable components of this EWP;
- A statement that the work will be performed in compliance with this EWP and 29 CFR 1910.120;
- A copy of the contractor's health and safety plan (HASP), in electronic format;
- Identification of disposal facilities for potential waste streams; and
- Identification of sources of any anticipated backfill, along with chemical testing results, as needed.

2 SOIL SCREENING METHODS

Visual, olfactory and instrument-based (e.g. photoionization detector) soil screening will be performed by a qualified environmental professional during all excavations into known or potentially contaminated material (remaining contamination). Soil screening will be performed when invasive work is conducted and will include all excavation and invasive work performed during development, such as excavations for foundations and utility work, after issuance of the COC.

Soils will be segregated, based on previous environmental data and on screening results, into material that requires off-site disposal and material that requires testing to determine if the material can be reused on-site as soil beneath a cover or if the material can be used as cover soil.

3 SOIL STAGING METHODS

Soil stockpiles will be continuously encircled with a berm and/or silt fence. Hay bales will be used as needed near catch basins, surface waters and other discharge points.

Stockpiles will be kept covered at all times with appropriately anchored tarps. Stockpiles will be routinely inspected and damaged tarp covers will be promptly replaced.

Stockpiles will be inspected at a minimum once each week and after every storm event. Results of inspections will be recorded in a logbook and maintained at the site and available for inspection by the NYSDEC.

4 MATERIALS EXCAVATION AND LOAD-OUT

A qualified environmental professional or person under his/her supervision will oversee all invasive work and the excavation and load-out of all excavated material.

The owner of the property and remedial party (if applicable) and its contractors are responsible for safe execution of all invasive and other work performed under this Plan.

The presence of utilities and easements on the site will be investigated by the qualified environmental professional. It will be determined whether a risk or impediment to the planned work under this SMP is posed by utilities or easements on the site.

Loaded vehicles leaving the site will be appropriately lined, tarped, securely covered, manifested, and placarded in accordance with appropriate Federal, State, local, and NYSDOT requirements (and all other applicable transportation requirements).

A truck wash will be operated on-site, as appropriate. The qualified environmental professional will be responsible for ensuring that all outbound trucks will be washed at the truck wash before leaving the site until the activities performed under this section are complete. Truck wash waters will be collected and disposed of off-site in an appropriate manner.

Locations where vehicles enter or exit the site shall be inspected daily for evidence of off-site soil tracking.

The qualified environmental professional will be responsible for ensuring that all egress points for truck and equipment transport from the site are clean of dirt and other materials derived from the site during intrusive excavation activities. Cleaning of the adjacent streets will be performed as needed to maintain a clean condition with respect to site-derived materials.

5 MATERIALS TRANSPORT OFF-SITE

All transport of materials will be performed by licensed haulers in accordance with appropriate local, State, and Federal regulations, including 6 NYCRR part 364. Haulers will be appropriately licensed and trucks properly placarded.

Material transported by trucks exiting the site will be secured with tight-fitting covers. Loose-fitting canvas-type truck covers will be prohibited. If loads contain wet material capable of producing free liquid, truck liners will be used.

Truck transport routes are dependent on the disposal facility. All trucks loaded with site materials will exit the vicinity of the site using only approved truck routes. These are the most appropriate routes and take into account: (a) limiting transport through residential areas and past sensitive sites; (b) use of city mapped truck routes; (c) prohibiting off-site queuing of trucks entering the facility; (d) limiting total distance to major highways; (e) promoting safety in access to highways; and (f) overall safety in transport.

Trucks will be prohibited from stopping and idling in the neighborhood outside the project site.

Egress points for truck and equipment transport from the site will be kept clean of dirt and other materials during site remediation and development.

Queuing of trucks will be performed on-site in order to minimize off-site disturbance. Off-site queuing will be prohibited.

6 MATERIALS DISPOSAL OFF-SITE

All material excavated and removed from the site will be characterized, transported, and disposed in accordance with all local, State (including 6 NYCRR part 360) and Federal regulations. If disposal of material from this site is proposed for unregulated off-site disposal (i.e. clean soil removed for development purposes), a formal request with an associated plan will be made to the NYSDEC. Unregulated off-site management of materials from this site will not occur without formal NYSDEC approval.

Off-site disposal locations for excavated soils will be identified in the pre-excavation notification. This will include estimated quantities and a breakdown by class of disposal facility, if appropriate, i.e. hazardous waste disposal facility, solid waste landfill, petroleum treatment facility, C/D recycling facility, etc. Actual disposal quantities and associated documentation will be reported to the NYSDEC in the Periodic Review Report. This documentation will include: waste profiles, test results, facility acceptance letters, manifests, bills of lading and facility receipts.

Non-hazardous historic fill (with concentrations above Unrestricted SCOs) and contaminated soils taken off-site will be handled, at minimum, as a Municipal Solid Waste per 6 NYCRR 360-1.2. Material that does not meet Unrestricted SCOs is prohibited from being taken to a New York State recycling facility (6 NYCRR 360-16 Registration Facility).

7 MATERIALS REUSE ON-SITE

The qualified environmental professional will ensure that procedures defined for materials reuse in this interim SMP are followed and that unacceptable material does not remain on-site. Contaminated on-site material, including historic fill and contaminated soil, that is acceptable for reuse on-site will be placed below the demarcation layer or impervious surface, and will not be reused within a cover soil layer, within landscaping berms, or as backfill for subsurface utility lines.

Any demolition material proposed for reuse on-site will be sampled and the results will be reported to the NYSDEC for acceptance. Concrete crushing or processing on-site will not be performed without prior NYSDEC approval. Organic matter (wood, roots, stumps, etc.) or other solid waste derived from clearing and grubbing of the site will not be reused on-site.

8 FLUIDS MANAGEMENT

All liquids to be removed from the site, including but not limited to, excavation dewatering, decontamination waters and groundwater monitoring well purge and development waters, will be handled, transported and disposed in accordance with applicable local, State, and Federal regulations. Dewatering, purge and development fluids will not be recharged back to the land surface or subsurface of the site, and will be managed off-site, unless prior approval is obtained from NYSDEC.

Discharge of water generated during large-scale construction activities to surface waters (i.e. a local pond, stream or river) will be performed under a SPDES permit.

9 COVER SYSTEM RESTORATION

After the completion of soil removal and any other invasive activities the cover system will be restored in a manner that complies with the applicable decision document. The existing cover system is comprised of a concrete slab. A demarcation layer will be placed to provide a visual reference to the top of the remaining contamination zone, the zone that requires adherence to special conditions for disturbance of remaining contaminated soils defined in this SMP. If the type of cover system changes from that which exists prior to the excavation (i.e., a soil cover is replaced by asphalt), this will constitute a modification of the cover element of the remedy and the upper surface of the remaining contamination. A figure showing the modified surface will be included in the subsequent Periodic Review Report and in an updated SMP.

10 BACKFILL FROM OFF-SITE SOURCES

All materials proposed for import onto the site will be approved by the qualified environmental professional and will be in compliance with provisions in this SMP prior to receipt at the site. A Request to Import/Reuse Fill or Soil form, which can be found at <http://www.dec.ny.gov/regulations/67386.html>, will be prepared and submitted to the NYSDEC project manager allowing a minimum of 5 business days for review.

Material from industrial sites, spill sites, or other environmental remediation sites or potentially contaminated sites will not be imported to the site.

All imported soils will meet the backfill and cover soil quality standards established in 6 NYCRR 375-6.7(d). Soils that meet 'exempt' fill requirements under 6 NYCRR part 360, but do not meet backfill or cover soil objectives for this site, will not be imported onto the site without prior approval by NYSDEC. Solid waste will not be imported onto the site.

Trucks entering the site with imported soils will be securely covered with tight fitting covers. Imported soils will be stockpiled separately from excavated materials and covered to prevent dust releases.

11 STORMWATER POLLUTION PREVENTION

Barriers and hay bale checks will be installed and inspected once per week and after every qualifying storm event. Results of inspections will be recorded in a logbook and maintained at the site and available for inspection by the NYSDEC. All necessary repairs shall be made immediately.

Accumulated sediments will be removed as required to keep the barrier and hay bale check functional.

All undercutting or erosion of the silt fence toe anchor shall be repaired immediately with appropriate backfill materials.

Manufacturer's recommendations will be followed for replacing silt fencing damaged due to weathering.

Erosion and sediment control measures identified in the SMP shall be observed to ensure that they are operating correctly. Where discharge locations or points are accessible, they shall be inspected to ascertain whether erosion control measures are effective in preventing significant impacts to receiving waters.

Silt fencing or hay bales will be installed around the entire perimeter of the construction area.

12 EXCAVATION CONTINGENCY PLAN

If underground tanks or other previously unidentified contaminant sources are found during post-remedial subsurface excavations or development related construction, excavation activities will be suspended until sufficient equipment is mobilized to address the condition.

Sampling will be performed on product, sediment and surrounding soils, etc. as necessary to determine the nature of the material and proper disposal method. Chemical analysis will be performed for a full list of analytes (TAL metals; TCL volatiles and semi-volatiles, TCL pesticides and PCBs), unless the site history and previous sampling results provide a sufficient justification to limit the list of analytes. In this case, a reduced list of analytes will be proposed to the NYSDEC for approval prior to sampling.

Identification of unknown or unexpected contaminated media identified by screening during invasive site work will be promptly communicated by phone to NYSDEC's Project Manager.

Reportable quantities of petroleum product will also be reported to the NYSDEC spills hotline. These findings will be also included in the Periodic Review Report.

13 COMMUNITY AIR MONITORING PLAN

A figure showing the location of air sampling stations based on generally prevailing wind conditions will be generated before the commencement of excavation. These locations will be adjusted on a daily or more frequent basis based on actual wind directions to provide upwind and downwind monitoring stations.

Exceedances of action levels listed in the CAMP will be reported to NYSDEC and NYSDOH Project Managers.

14 ODOR CONTROL PLAN

This odor control plan is capable of controlling emissions of nuisance odors on- and off-site. Specific odor control methods to be used on a routine basis will be defined before the commencement of excavation. If nuisance odors are identified at the site boundary, or if odor complaints are received, work will be halted and the source of odors will be identified and corrected. Work will not resume until all nuisance odors have been abated. NYSDEC and NYSDOH will be notified of all odor events and of any other complaints about the project. Implementation of all odor controls, including the halt of work, is the responsibility of the remedial party's Remediation Engineer, and any measures that are implemented will be discussed in the Periodic Review Report.

All necessary means will be employed to prevent on- and off-site nuisances. At a minimum, these measures will include: (a) limiting the area of open excavations and size of soil stockpiles; (b) shrouding open excavations with tarps and other covers; and (c) using foams to cover exposed odorous soils. If odors develop and cannot be otherwise controlled, additional means to eliminate odor nuisances will include: (d) direct load-out of soils to trucks for off-site disposal; (e) use of chemical odorants in spray or misting systems; and, (f) use of staff to monitor odors in surrounding neighborhoods.

If nuisance odors develop during intrusive work that cannot be corrected, or where the control of nuisance odors cannot otherwise be achieved due to on-site conditions or close proximity to sensitive receptors, odor control will be achieved by sheltering the excavation and handling areas in a temporary containment structure equipped with appropriate air venting/filtering systems.

15 DUST CONTROL PLAN

A dust suppression plan that addresses dust management during invasive on-site work will include, at a minimum, the items listed below:

- Dust suppression will be achieved through the use of a water truck for road wetting, if needed. The truck will be equipped with a water cannon capable of spraying water directly onto off-road areas including excavations and stockpiles.
- Clearing and grubbing of larger sites will be done in stages to limit the area of exposed, unvegetated soils vulnerable to dust production.
- Gravel will be used on roadways to provide a clean and dust-free road surface.
- On-site roads will be limited in total area to minimize the area required for water truck sprinkling.

16 OTHER NUISANCES

If deemed necessary, a plan for rodent control will be developed and utilized by the contractor prior to and during site clearing and site grubbing, and during all remedial work.

If deemed necessary, a plan will be developed and utilized by the contractor for all remedial work to ensure compliance with local noise control ordinances.