Westchester Colprovia Site

WESTCHESTER COUNTY, NEW YORK

Site Management Plan

NYSDEC Site Number: 3-60-018

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Revisions to Final Approved Site Management Plan:

Revision #	Submitted Date	Summary of Revision	DEC Approval Date

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SITE MANAGEMENT PLAN

1.0 INTRODUCTION AND DESCRIPTION OF REMEDIAL PROGRAM

1.1 INTRODUCTION

This document is required as an element of the remedial program at the Westchester Colprovia Site (hereinafter referred to as the "Site") under the New York State (NYS) Inactive Hazardous Waste Disposal Site Remedial Program administered by New York State Department of Environmental Conservation (NYSDEC). The site was remediated in accordance with Order on Consent Index # W3-0224-87-04, Site # 3-60-018, which was executed on July 26, 1989.

1.1.1 General

Peckham Industries, Inc. (Peckham) entered into an Order on Consent with the NYSDEC to remediate an approximately 9.2 acre property located in the Town of Bedford, Westchester County, New York. This Order on Consent required the Remedial Party Peckham, to investigate and remediate contaminated media at the site. A figure showing the site location and boundaries of this 9.2-acre site is provided in Figures 1 and 2. The boundaries of the site are more fully described in the metes and bounds site description in Appendix A.

After completion of the remedial work described in the Remedial Action Work Plan, some contamination was left in the subsurface at this site, which is hereafter referred to as 'remaining contamination." This Site Management Plan (SMP) was prepared to manage remaining contamination at the site until the NYSDEC deems the Engineering Control on site is no longer necessary. All reports associated with the site can be viewed by contacting the NYSDEC or its successor agency managing environmental issues in New York State.

This SMP was prepared by ARCADIS of New York, Inc. (ARCADIS), on behalf of Peckham, in accordance with the requirements in NYSDEC DER-10 Technical Guidance for Site Investigation and Remediation, dated May, 2010, and the guidelines provided by NYSDEC. This SMP addresses the means for implementing the Engineering Controls (ECs) that are required for the site.

1.1.2 Purpose

The site contains contamination left after completion of the remedial action. Engineering Controls have been incorporated into the site remedy to control exposure to remaining contamination during the use of the site to ensure protection of public health and the environment. This SMP specifies the methods necessary to ensure compliance with all ECs required for contamination that remains at the site. This plan has been approved by the NYSDEC, and compliance with this plan is required by the grantor of the SMP and the grantor's successors and assigns. This SMP may only be revised with the approval of the NYSDEC.

This SMP provides a detailed description of all procedures required to manage remaining contamination at the site after completion of the Remedial Action, including: (1) implementation and management of all Engineering Controls; (2) operation and maintenance of all treatment, collection, containment, or recovery systems; (3) performance of periodic inspections, certification of results, and submittal of Periodic Review Reports; and (4) defining criteria for termination of treatment system operations.

To address these needs, this SMP includes three plans: (1) an Engineering Control Plan for implementation and management of ECs; (2) a Monitoring Plan for implementation of Site Monitoring; (3) an Operation and Maintenance Plan for implementation of remedial collection, containment, treatment, and recovery systems (including, where appropriate, preparation of an Operation and Maintenance Manual for complex systems).

This plan also includes a description of Periodic Review Reports for the periodic submittal of data, information, recommendations, and certifications to NYSDEC.

It is important to note that:

- This SMP details the site-specific implementation procedures that are required for the site;

- Failure to comply with this SMP is also a violation of Environmental Conservation Law, 6NYCRR Part 375 and the Order on Consent (Index #W3-0224-87-04; Site #3-60-018) for the site, and thereby subject to applicable penalties.

1.1.3 Revisions

Revisions to this plan will be proposed in writing to the NYSDEC's project manager. In accordance with the Environmental Easement for the site, the NYSDEC will provide a notice of any approved changes to the SMP, and append these notices to the SMP that is retained in its files.

1.2 SITE BACKGROUND

1.2.1 Site Location and Description

The site is located in the Town of Bedford, County of Westchester, New York and is identified as Block 0001 and Lot 003 on the Westchester County Tax Map. The site is an approximately 9.2-acre area bounded by Route 117 By-Pass Road and the Saw Mill Parkway to the north and west, the Taconic Correctional Facility to the south (see Figure 1). The boundaries of the site are more fully described in Appendix A – Metes and Bounds.

1.2.2 Site History

The Westchester Colprovia site is located on Harris Road in the Town of Bedford, New York. The Site location is shown on Figure 1. The Westchester Colprovia Corporation formerly operated an asphalt production plant at the site between 1932 and 1987. The asphalt plant, former repair shop, laboratory, and office were located on approximately two acres in the southwest corner of the approximately 9.2 acre property (Figure 2). An asphalt production plant operated at the site for approximately 55 years. Solvents were used at the site in laboratory testing of asphalt mix samples and for cleaning parts or equipment in the repair shop. Site investigations have indicated that solvents were disposed of in the area of the former shop and laboratory. Westchester Colprovia leased the property from Worden Sand & Gravel and then Colonial Sand & Gravel from 1932 through the mid-1970s. At that time the land was purchased by

Westchester Colprovia. The site was sold to O&G Industries in 1987 which subsequently demolished the repair shop in 1989. The site is now owned and operated by Peckham Materials, which continues to operate an asphalt production plant.

1.2.3 Geologic Conditions

Geographically, the Site is located within the Manhattan Prong region of the New England physiographic province, an area characterized by faulted metamorphic rock highlands and valleys typically filled with glacial deposits. Bedrock at the site is gneissic schist which underlies a relatively thin layer (20-45 feet) of unconsolidated deposits consisting of silt, sand, and gravel. The water table at the Site was encountered at depths ranging from 10-20 feet below ground surface (bgs). Groundwater flow in the vicinity of the site is generally to the northwest.

1.3 SUMMARY OF REMEDIAL INVESTIGATION FINDINGS

A Remedial Investigation (RI) was performed in several phases to characterize the nature and extent of contamination at the site. The results of the RI are described in detail in the following reports:

- Report of Site Investigations, Malcolm Pirnie, Inc., November 1987.
- Report of Site Investigations, Malcolm Pirnie, Inc., May 1988.
- Report of Site Investigations, Malcolm Pirnie, Inc., July 1988.
- Groundwater/Air Sampling Summary Report, Malcolm Pirnie, April 2, 2008.

Generally, the RI determined that volatile organic compounds (VOCs) were present at concentrations greater than applicable standards, criteria, and guidance (SCGs) in groundwater. These compounds were used as degreasers, in laboratory tests of asphalt mixtures, and components of gasoline used as vehicle fuel on-site.

Below is a summary of site conditions when the RI was performed in 1987, 1988, 1990, and 2008:

<u>Soil</u>

Analytical results from the 14 subsurface soil samples collected indicated that concentrations of VOCs were generally low and well below clean-up objectives, with the

exception of sample SBP-1, which was collected near the office. This sample contained 0.82 parts per million (ppm) of acetone, 1.1 ppm of 1,1,1-trichloroethane, and 1.4 ppm of xylene at concentrations that slightly exceeded the clean-up objectives of 0.2, 0.80, and 1.2 ppm, respectively.

Site-Related Groundwater

Over 100 groundwater samples from 14 monitoring wells were collected which indicated that tetrachloroethene (PCE), trichloroethene (TCE), 1,2-dichloroethene (DCE), 1,1,1-trichloroethane (1,1,1-TCA), benzene, xylene, 1,1-dichloroethane, and lead were detected at concentrations greater than corresponding groundwater standards during the initial investigation. Monitoring since 1987 has shown two distinct areas of contamination. During this time, two Interim Remedial Measures (IRMs) were completed to reduce the concentration of the contaminants of concern. Additional information about the IRMs is provided in Section 1.4. TCE and 1,1,1-TCA were detected in two bedrock groundwater samples collected in 1994 and 1995, but at concentrations below the corresponding groundwater standards. Subsequent sampling in 1995 and 1996 showed that these contaminants were no longer present. Results from sampling events have shown that the plume of contamination is confined to the Site, with the exception of W-12 which is located on the Colonial Sand & Gravel property. The most current round of sampling, conducted in February 2008, indicated that none of the site wells contained COCs at concentrations greater than corresponding NYSDEC Groundwater Standards.

Site-Related Soil Vapor Intrusion

A soil gas survey was conducted at the site in July 1987 during which 38 samples were collected and analyzed for PCE, TCE, and TCA. Results indicated that there were two areas of contamination at the site; the area between the office and the asphalt plant and the area near the shop.

In February 2008, at the request of NYSDEC, indoor air and sub-slab soil vapor sampling was conducted in the 960 square foot office building on the asphalt plant site to evaluate the potential for residual chlorinated VOCs (CVOCs) to diffuse from the

subsurface into indoor air and to evaluate the implications of any such vapor intrusion on human health for potential future workers at the site. A total of three air samples were collected to evaluate whether volatile compounds that were previously detected in groundwater at the site were present in soil vapor and indoor air. Of the compounds historically detected in groundwater, the sub-slab soil vapor sample contained 1,1,1-TCA and TCE at concentrations of 1,100 µg/m^3 and 15 µg/m^3, respectively. While the results of the indoor air sample did not indicate exposure to workers from subsurface chemicals, the concentrations of CVOCs in the sub-slab soil vapor sample required mitigation in accordance with the matrices in the New York State Department of Health Guidance for Evaluating Soil Vapor Intrusion in the State of New York, dated October 2006 (NYSDOH 2006). Therefore, Peckham installed a simple sub-slab depressurization system (SSDS) in September 2009 to mitigate potential soil vapor intrusion into the office building.

Underground Storage Tanks

In April 1987, 10 soil samples were collected from the three areas on the site where seven underground petroleum storage tanks had previously been removed. Post-excavation sampling results confirmed that contaminated soil had been removed.

1.4 SUMMARY OF REMEDIAL ACTIONS

The site was remediated in accordance with the NYSDEC-approved May 1988 and July 1990 Interim Remedial Proposals.

The following is a summary of the Remedial Actions performed at the site:

Two IRMs were completed at the site. The first IRM consisted of an air sparging/soil vapor extraction system. The second IRM consisted of a groundwater extraction and treatment system with an air stripper.

1. Installation of a soil vapor extraction (SVE) system in January 1992 in the area of the office and plant, which was upgraded to include an air sparging (AS) system in March 1995, with an air injection well near W-5, to address

VOC-impacted soil and groundwater. The system operated through early 1997.

2. A groundwater extraction and treatment system equipped with an air stripper, was installed in March 1992 in the vicinity of MW-3 to address VOC-impacted groundwater, which operated through December 1993.

3. Development and implementation of a Site Management Plan for long term management of remaining contamination, which includes plans for: (1) Engineering Controls, (2) monitoring, (3) operation and maintenance and (4) reporting;

Remedial activities were completed at the site in 1997.

1.4.1 Site-Related Treatment Systems

The SVE system consisted of a perforated pipe that was installed as a soil vent through which a vacuum was induced by a blower attached to the vent. The system drew a mixture of air and contaminated vapor through the pore space in the soil, which was subsequently passed through granular activated carbon canisters to remove the VOCs before being released to the atmosphere. After three years of operation, an AS system was added to the SVE system to increase the rate of contaminant removal from the groundwater in the vicinity of W-5. The air sparging system consisted of an air injection well installed to a depth of 46 feet bgs. Air was injected, moved upward toward the ground surface, through the groundwater, stripping the VOCs from the soil and groundwater. The air was then collected through the SVE system as described above. This combined AS/SVE system operated for an additional two years, through early 1997 after groundwater sampling data confirmed significant reduction in CVOCs.

The groundwater extraction and treatment system consisted of a multi-staged diffused bubble aeration system that brought the contaminated water into contact with air and stripped the volatiles from the water. A total of 257,250 gallons of water was treated between March 1992 and December 1993.

Figure 3 shows the approximate locations of these former remedial systems.

1.4.2 Remaining Contamination

In February 2008, groundwater and air sampling activities were conducted at the request of the NYSDEC to evaluate the potential for soil vapor intrusion into the on-site office building and to support delisting or reclassification of the site. The three remaining monitoring wells (W-3, W-4, and W-12) and the site's production well (PW) were sampled (Figure 4). A sub-slab soil vapor sample (360018-SS-01) was collected in the center of the basement and an indoor air sample (360018-IA-01) was collected from the breathing zone in a first floor office located on the north side of the building. An ambient outdoor air sample (360018-OA-01) was collected approximately 50 feet to the west of the office building (Figure 4) from approximately three-feet above ground surface in a vegetated area between the Route 117 Bypass and the driveway for the site.

Tables 1 through 3 summarize the results of all groundwater and soil vapor/air samples which represent remaining conditions at the site after completion of Interim Remedial Actions.

As shown in Tables 1 and 2, none of the groundwater samples collected contained site-related COCs at concentrations greater than corresponding NYSDEC Class GA Groundwater Standards.

As shown in Table 3, the sub-slab soil vapor sample contained 1,1,1-TCA at a concentration of 1,100 micrograms per cubic meter ($\mu g/m^3$). This result is greater than the NYSDOH Guidance for Evaluating Soil Vapor Intrusion in the State of New York (NYSDOH Guidance) Soil Vapor / Indoor Air Matrix 2 mitigation value. The indoor air sample did not contain detectable concentrations of 1,1,1-TCA. As shown in Table 3, the sub-slab soil vapor sample contained TCE at a concentration of 15 $\mu g/m^3$; greater than the NYSDOH Guidance Soil Vapor / Indoor Air Matrix 1 monitor value of 5 $\mu g/m^3$ but less than the USEPA Guidance value of 22 $\mu g/m^3$. The indoor air samples contained TCE at a concentration of 0.3$\mu g/m^3$.

Although the concentration of 1,1,1-trichloroethane was 10 percent above the NYSDOH Guidance value for mitigation, this compound was not detected in the indoor air sample indicating that there was no exposure to this compound to workers. However, the concentrations of CVOCs in the sub-slab soil vapor sample required mitigation in

accordance with the matrices in the New York State Department of Health Guidance for Evaluating Soil Vapor Intrusion in the State of New York, dated October 2006 (NYSDOH 2006). Therefore, Peckham installed a simple sub-slab depressurization system (SSDS) in September 2009 to mitigate potential soil vapor intrusion into the office building.

2.0 ENGINEERING AND INSTITUTIONAL CONTROL PLAN

2.1 INTRODUCTION

2.1.1 General

Since remaining contaminated soil vapor exists in a portion of the site, Engineering Controls (ECs) are required to protect human health and the environment. This Engineering Control Plan describes the procedures for the implementation and management of all ECs at the site. The EC Plan is one component of the SMP and is subject to revision by NYSDEC.

2.1.2 Purpose

This plan provides:

- A description of all ECs on the site;
- The basic implementation and intended role of each EC;
- A description of the features to be evaluated during each required inspection and periodic review;
- A description of plans and procedures to be followed for implementation of ECs, such as the implementation of the Excavation Work Plan for the proper handling of remaining contamination that may be disturbed during maintenance or redevelopment work on the site; and
- Any other provisions necessary to identify or establish methods for implementing the ECs required by the site remedy, as determined by the NYSDEC.

2.2 ENGINEERING CONTROLS

2.2.1 Engineering Control Systems

2.2.1.1 Sub-slab Depressurization System

The SSDS system uses two four-inch PVC suction points in the northeast and southwest corners of the Peckham Industries office building. Each suction line is equipped with a liquid-filled u-tube manometer to provide a visual flow indicator. Each suction line is routed to a single centrifugal blower capable of a maximum flow rate of 173 cubic feet per minute (cfm). As show in the As-Built Drawings on Figures 5 through 7, the blower is mounted on the southern exterior of the office building. The blower discharge is routed along the exterior of the building and has an emissions point (EP-00001) stack height of 18 inches above the eave line of the roof. The blower fan is controlled by an electrical disconnect switch. As shown on Figures 6 and 7, the switch is mounted on the exterior of the building, adjacent to the blower fan.

The SSDS remedial construction was initiated and completed in September 2009. The remedial system was brought online in January 8, 2010. The Westchester County Department of Health (WCDOH) issued the Permit to Operate a Source of Air Contamination (WCDOH Permit 52-7193) on January 12, 2010. The layout of the full-scale remedial system including extraction and treatment equipment, and piping and instrumentation diagram are shown on the As-Built Drawings on Figures 5 through 7. SSDS equipment specifications/cut sheets are provided in Appendix B.

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

2.2.2 Criteria for Completion of Remediation/Termination of Remedial Systems

Generally, remedial processes are considered completed when effectiveness monitoring indicates that the remedy has achieved the remedial action objectives

identified by the decision document. The framework for determining when remedial processes are complete is provided in Section 6.6 of NYSDEC DER-10.

2.2.2.1 Sub-slab Depressurization System (SSDS)

The active SSD system will not be discontinued unless prior written approval is granted by the NYSDEC. In the event that monitoring data indicates that the SSD system is no longer required, a proposal to discontinue the SSD system will be submitted by the property owner to the NYSDEC and NYSDOH.

2.3 INSTITUTIONAL CONTROLS

A series of Institutional Controls is required by the ROD to implement, maintain and monitor Engineering Control systems. Adherence to these Institutional Controls on the site is required and will be implemented under this Site Management Plan. These Institutional Controls are:

- Compliance with this SMP by the Grantor and the Grantor's successors and assigns;
- All Engineering Controls must be operated and maintained as specified in this SMP;
- All Engineering Controls on the Controlled Property must be inspected at a frequency and in a manner defined in the SMP.
- Data and information pertinent to Site Management of the Controlled Property must be reported at the frequency and in a manner defined in this SMP;
- The site is currently zoned for commercial and industrial use, and any other use for the site would be subject to the municipality's zoning ordinance;
- The potential for vapor intrusion must be evaluated for any buildings developed in the area noted on Figure 2, and any potential impacts that are identified must be monitored or mitigated;
- Vegetable gardens and farming on the property are prohibited;
- The site owner or remedial party will submit to NYSDEC a written statement that certifies, under penalty of perjury, that: (1) controls employed at the Controlled Property are unchanged from the previous certification or that any changes to the

controls were approved by the NYSDEC; and, (2) nothing has occurred that impairs the ability of the controls to protect public health and environment or that constitute a violation or failure to comply with the SMP. NYSDEC retains the right to access such Controlled Property at any time in order to evaluate the continued maintenance of any and all controls. This certification shall be submitted annually, or an alternate period of time that NYSDEC may allow and will be made by an expert that the NYSDEC finds acceptable.

2.3.1 Soil Vapor Intrusion Evaluation

Prior to the construction of any enclosed structures located over areas that contain remaining contamination and the potential for soil vapor intrusion (SVI) has been identified (see Figure 2), an SVI evaluation will be performed to determine whether any mitigation measures are necessary to eliminate potential exposure to vapors in the proposed structure. Alternatively, an SVI mitigation system may be installed as an element of the building foundation without first conducting an investigation. This mitigation system will include a vapor barrier and passive sub-slab depressurization system that is capable of being converted to an active system.

Prior to conducting an SVI investigation or installing a mitigation system, a work plan will be developed and submitted to the NYSDEC and NYSDOH for approval. This work plan will be developed in accordance with the most recent NYSDOH "Guidance for Evaluating Vapor Intrusion in the State of New York". Measures to be employed to mitigate potential vapor intrusion will be evaluated, selected, designed, installed, and maintained based on the SVI evaluation, the NYSDOH guidance, and construction details of the proposed structure.

Preliminary (unvalidated) SVI sampling data will be forwarded to the NYSDEC and NYSDOH for initial review and interpretation. Upon validation, the final data will be transmitted to the agencies, along with a recommendation for follow-up action, such as mitigation.

SVI sampling results, evaluations, and follow-up actions will also be summarized in the next Periodic Review Report.

2.4 INSPECTIONS AND NOTIFICATIONS

2.4.1 Inspections

Inspections of all remedial components installed at the site will be conducted at the frequency specified in the SMP Monitoring Plan schedule. A comprehensive site-wide inspection will be conducted annually, regardless of the frequency of the Periodic Review Report. The inspections will determine and document the following:

- Whether Engineering Controls continue to perform as designed;
- If these controls continue to be protective of human health and the environment;
- Compliance with requirements of this SMP;
- Achievement of remedial performance criteria;
- If site records are complete and up to date; and
- Changes, or needed changes, to the remedial or monitoring system;

Inspections will be conducted in accordance with the procedures set forth in the Monitoring Plan of this SMP (Section 3). The reporting requirements are outlined in the Periodic Review Reporting section of this plan (Section 5).

If an emergency, such as a natural disaster or an unforeseen failure of any of the ECs occurs, an inspection of the site will be conducted within 5 days of the event to verify the effectiveness of the ECs implemented at the site by a qualified environmental professional as determined by NYSDEC.

2.4.2 Notifications

Notifications will be submitted by the property owner to the NYSDEC as needed for the following reasons:

- 60-day advance notice of any proposed changes in site use that are required under the terms of the Order on Consent, 6NYCRR Part 375, and/or Environmental Conservation Law.
- Notice within 48-hours of any damage or defect to the foundations structures that reduces or has the potential to reduce the effectiveness of other Engineering Controls and likewise any action to be taken to mitigate the damage or defect.

- Notice within 48-hours of any emergency, such as a fire, flood, or earthquake that reduces or has the potential to reduce the effectiveness of Engineering Controls in place at the site, including 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 any emergency event requiring ongoing responsive action shall be submitted to the NYSDEC within 45 days and shall describe and document 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 has been provided with a copy of the Order on Consent, and all approved work plans and reports, including this 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.

2.5 CONTINGENCY PLAN

Emergencies may include injury to personnel, fire or explosion, environmental release, or serious weather conditions.

2.5.1 Emergency Telephone Numbers

In the event of any environmentally related situation or unplanned occurrence requiring assistance the Owner or Owner's representative(s) should contact the appropriate party from the contact list below. For emergencies, appropriate emergency response personnel should be contacted. Prompt contact should also be made to ARCADIS. These emergency contact lists must be maintained in an easily accessible location at the site.

Table 4: Emergency Contact Numbers

Medical, Fire, and Police:	911
One Call Center:	(800) 272-4480 (3 day notice required for utility markout)
Poison Control Center:	(800) 222-1222
Pollution Toxic Chemical Oil Spills:	(800) 424-8802
NYSDEC Spills Hotline	(800) 457-7362

Table 5: Contact Numbers

Robert Yaremko, Peckham	914-424-5857
Bruce Nelson, ARCADIS	518-250-7300

* Note: Contact numbers subject to change and should be updated as necessary

2.5.2 Map and Directions to Nearest Health Facility

Site Location: Harris Road, Bedford, New York

Nearest Hospital Name: Putnam Hospital Center

Hospital Location: 670 Stoneleigh Avenue, Carmel, NY 10512

Hospital Telephone: (845) 279-5711

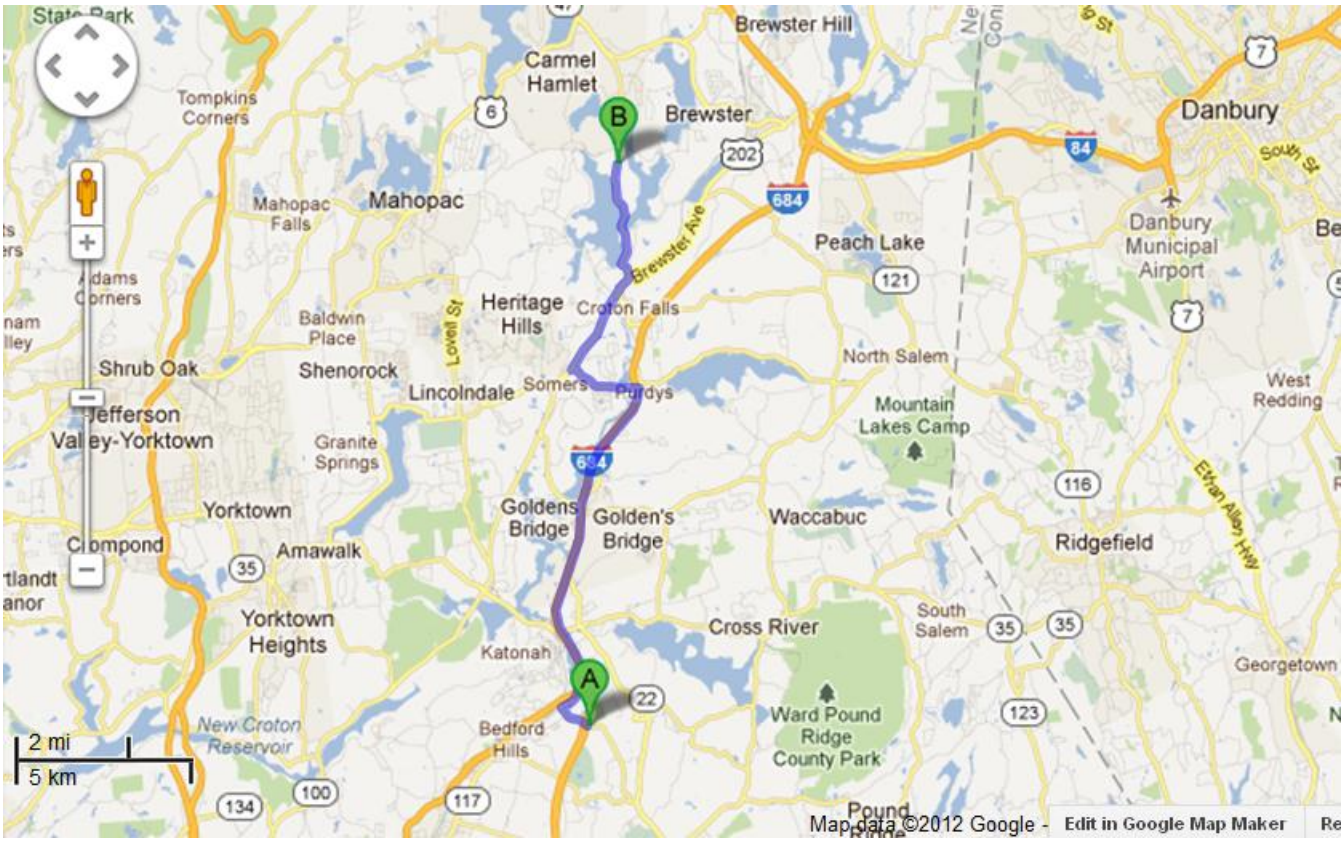
Directions to the Hospital:

1. Head northwest on Harris Rd toward Beaver Dam Rd	0.6 mi
2. Turn right onto NY-117 N	0.3 mi
3. Take the ramp onto Saw Mill Pkwy N	0.4 mi
4. Take the exit toward I-684 N	0.7 mi
5. Keep left at the fork, follow signs for I-684/Brewster and merge onto I-684 N	4.7 mi
6. Take exit 7 for NY-116 toward Purdys/Somers	0.2 mi
7. Turn left onto NY-116 W/Mid Way. Continue to follow NY-116 W	1.4 mi
8. Turn right onto US-202 E/Somerstown Turnpike	1.7 mi
9. Turn left onto County Rd 35/Daisy Ln/Somerstown Turnpike. Continue to follow County Rd 35	1.2 mi
10. Turn left onto County Rd 35/Stoneleigh Ave	

Total Distance: 12.6 miles

Total Estimated Time: 21 minutes

Map Showing Route from the site to the Hospital:



2.5.3 Response Procedures

As appropriate, the fire department and other emergency response group will be notified immediately by telephone of the emergency. The emergency telephone number list is found at the beginning of this Contingency Plan (Table 4). The list will also be posted prominently at the site and made readily available to all personnel at all times.

3.0 SITE MONITORING PLAN

3.1 INTRODUCTION

3.1.1 General

The Monitoring Plan describes the measures for evaluating the performance and effectiveness of the remedy to reduce or mitigate contamination at the site, the soil cover system, and all affected site media identified below. Monitoring of other Engineering Controls is described in Chapter 4, Operation, Monitoring and Maintenance Plan. This Monitoring Plan may only be revised with the approval of NYSDEC.

3.1.2 Purpose and Schedule

This Monitoring Plan describes the methods to be used for:

- Evaluating site information periodically to confirm that the remedy continues to be effective in protecting public health and the environment; and
- Preparing the necessary reports for the various monitoring activities.

To adequately address these issues, this Monitoring Plan provides information on:

- Sampling locations, protocol, and frequency;
- Information on all designed monitoring systems (e.g., well logs);
- Reporting requirements;
- Inspection and maintenance requirements for monitoring wells;
- Annual inspection and periodic certification.

Quarterly monitoring of the performance of the remedy and overall reduction in contamination on-site will be conducted for the first five years. The frequency thereafter will be determined by NYSDEC. Monitoring programs are summarized in Table 6 and outlined in detail in Sections 3.2 and 3.3 below.

Table 6: Monitoring/Inspection Schedule

Monitoring Program	Frequency*	Matrix	Analysis
Routine Maintenance/ Inspection	Quarterly	Not Applicable	Not applicable

* The frequency of events will be conducted as specified until otherwise approved by NYSDEC and NYSDOH

3.2 SITE-WIDE INSPECTION

Site-wide inspections will be performed on a regular schedule at a minimum of once a year. Site-wide inspections will also be performed after all severe weather conditions that may affect Engineering Controls or monitoring devices. During these inspections, an inspection form will be completed (Appendix C). The form will compile sufficient information to assess the following:

- Compliance with all site usage;
- An evaluation of the condition and continued effectiveness of ECs;
- General site conditions at the time of the inspection;
- The site management activities being conducted including, where appropriate, confirmation sampling and a health and safety inspection;
- Compliance with permits and schedules included in the Operation and Maintenance Plan; and
- Confirm that site records are up to date.

3.3 MONITORING REPORTING REQUIREMENTS

Forms and any other information generated during regular monitoring events and inspections will be kept on file on-site. All forms, and other relevant reporting formats used during the monitoring/inspection events, will be (1) subject to approval by NYSDEC and (2) submitted at the time of the Periodic Review Report, as specified in the Reporting Plan of this SMP.

All monitoring results will be reported to NYSDEC, NYSDOH, and WCDOH on a periodic basis in the Periodic Review Report. The report will include, at a minimum:

- Date(s) of event(s);
- Personnel conducting inspection;
- Description of the activities performed;
- Copies of all field forms completed (e.g., maintenance checklists, etc.);
- Any observations, conclusions, or recommendations; and

Data will be reported in hard copy or digital format as determined by NYSDEC. A summary of the monitoring program deliverables are summarized in Table 7 below.

Table 7: Schedule of Monitoring/Inspection Reports

Task	Reporting Frequency*
Periodic Review Report	Every five years

* The frequency of events will be conducted as specified until otherwise approved by NYSDEC

4.0 OPERATION AND MAINTENANCE PLAN

4.1 INTRODUCTION

This Operation and Maintenance Plan describes the measures necessary to operate, monitor and maintain the mechanical components of the remedy selected for the site. This Operation and Maintenance Plan:

- Includes the steps necessary to allow individuals unfamiliar with the site to operate and maintain the SSDS;
- Includes an operation and maintenance contingency plan; and,
- Will be updated periodically to reflect changes in site conditions or the manner in which the SSDS is operated and maintained.

A copy of this Operation and Maintenance Plan, along with the complete SMP, will be kept at the site. This Operation and Maintenance Plan is not to be used as a stand-alone document, but as a component document of the SMP.

4.2 ENGINEERING CONTROL SYSTEM OPERATION AND MAINTENANCE

4.2.1 Sub-slab Depressurization System

The SSDS was installed at the Peckham Industries office building in September 2009. The SSDS system uses two four-inch PVC suction points in the northeast and southwest corners of the Peckham Industries office building. Each suction line is equipped with a liquid-filled u-tube manometer to provide a visual flow indicator. Each suction line is routed to a single centrifugal blower capable of a maximum flow rate of 173 cubic feet per minute (cfm). As show in the As-Built Drawings on Figures 5 through 7, the blower is mounted on the southern exterior of the office building. The blower discharge is routed along the exterior of the building and has an emissions point (EP-00001) stack height of 18 inches above the eave line of the roof. The blower fan is controlled by an electrical disconnect switch. As shown on Figures 6 and 7, the switch is mounted on the exterior of the building, adjacent to the blower fan.

The SSDS remedial construction was initiated and completed in September 2009. The remedial system was brought online in January 8, 2010. The Westchester County Department of Health (WCDOH) issued the Permit to Operate a Source of Air Contamination (WCDOH Permit 52-7193) on January 12, 2010. The layout of the full-scale remedial system including extraction and treatment equipment, and piping and instrumentation diagram are shown on the As-Built Drawings on Figures 5 through 7.

4.2.1.1 Scope

The first year of SSDS operation has shown the system to prevent residual CVOCs below the office building slab from migrating into the building by inducing a negative pressure gradient within the subsurface. Continued maintenance of this pressure gradient will be confirmed by routine operational monitoring and reporting. Quarterly system checks will be conducted to confirm that the equipment is functioning properly and provide information to support any changes to the system to optimize its operation.

4.2.1.2 System Start-Up and Testing

Following system installation in September 2009, the operation and performance of the system was verified by installing four pressure monitoring points through the basement floor. Two monitoring points were installed in opposite corners (northwest and southeast) from the suction points and two monitoring points were installed near the center of the basement. These monitoring points were positioned on the north and south side of the concrete footer for the building support columns shown on Figures 6 and 7. Each monitoring point was measured before and after the SSDS was started using a digital pressure gauge to evaluate the pressure differential created by the SSDS. The differential pressure readings ranged from 0.066 water column inches (wci) in the monitoring point installed in the southeast corner of the basement to 0.115 wci in the point installed in the center of the basement to the north of the concrete footer. The pressure reading in both of the SSDS suction lines (northeast and southwest) at the time of the pressure monitoring test was 0.7 wci. Based on the differential pressure measurements recorded during the startup testing, the SSDS is effective at providing a negative pressure beneath the basement and is capable of maintaining the approved

minimum design pressure differential of 0.004 wci. The SSDS was shut down following the performance test pending final approval from the WCDOH.

Following startup of the SSDS on January 8, 2010, a sample (EP-0001) was collected from the SSDS discharge on February 4, 2010 to quantify volatile organic compounds (VOCs) emissions and verify compliance with the WCDOH Permit to Operate. The sample was collected from the discharge sampling port (Figure 5) using a 6 liter Summa Canister equipped with a two-hour flow controller. The sample was submitted to ConTest Analytical Laboratory, East Longmeadow, Massachusetts following chain-of-custody procedures for analysis of VOCs by United States Environmental Protection Agency (USEPA) Method TO-15. The calculated emission rates were generally one order of magnitude less than the WCDOH Permit to Operate permissible emission rates.

The SSDS was inspected on April 15, 2011 and the blower fan was operating. The vacuum in each of the SSDS suction lines was measured using the u-tube manometers installed at each suction point. The SSDS As-Built drawings (Figures 5 through 7) show the location of the SSDS blower fan and suction points. According to the u-tube manometer vacuum pressure measurements, the SSDS blower fan was producing approximately 0.7 wci of vacuum in each suction point. These data were consistent with the measurements recorded during the September 2009 SSSDS start-up testing, indicating that the SSDS was operating as intended.

The system testing described above will be conducted if, in the course of the SSDS lifetime, significant changes are made to the system, and the system must be restarted.

4.2.1.3 System Operation: Routine Operation Procedures

Operational monitoring will consist of the following:

- Inspection for visual damage to SSDS;
- Test for presence of leaks with smoke detector tubes and fix any seal and leaks identified;

- Check to ensure air intakes are not located close to the SSDS exhaust;
- Recording of system performance parameters [i.e., vacuums, flow rate at blower, and system status (On/Off)];
- Any required maintenance.

4.2.1.4 System Operation: Routine Equipment Maintenance

Checklists or forms will be completed during each maintenance event. Checklists/forms will include, but not be limited to the following information:

- Date;
- Name, company, and position of person(s) conducting maintenance activities;
- General site conditions;
- Differential pressure (manometer) readings at each SSDS suction point;
- Maintenance activities conducted;
- Where appropriate, color photographs or sketches showing the approximate location of any problems or incidents noted (included either on the checklist/form or on an attached sheet); and,
- Other documentation such as copies of invoices for maintenance work, receipts for replacement equipment, etc., (attached to the checklist/form).

4.2.1.4 System Operation: Non-Routine Equipment Maintenance

In the event that the SSDS is not operating as designed in terms of radius of influence, air flow, or vacuum pressure, then SSDS operations will be modified. This may include installing a blower with higher air flow and/or vacuum pressure specifications or replacing parts based on their life expectancy. If, after such adjustments, the SSDS is still not operating as designed, additional actions, including the installation of additional extraction points, will be discussed with the NYSDEC, NYSDOH, and WCDOH. These discussions will include consideration of additional indoor air sample analytical results.

4.3 ENGINEERING CONTROL SYSTEM PERFORMANCE MONITORING

4.3.1 Sub-slab Depressurization System

A SSDS, as described in Section 4.2.1, has been installed to mitigate possible soil vapor intrusion into the Peckham Industries office building.

4.3.2 Monitoring Schedule

The SSDS system checks will be conducted quarterly during the operation of the SSDS to confirm that the equipment is functioning properly.

Inspection frequency is subject to change with the approval of the NYSDEC. Unscheduled inspections and/or sampling may take place when a suspected failure of the SSDS has been reported or an emergency occurs that is deemed likely to affect the operation of the system. Monitoring deliverables for the SSDS are specified later in this Plan.

4.3.3 General Equipment Monitoring

A visual inspection of the complete system will be conducted during the monitoring event. SSDS components to be monitored include, but are not limited to, the following:

- Vacuum blower;
- Manometers; and
- General system piping.

A complete list of components to be checked is provided in the Inspection Checklist, presented in Appendix C. If any equipment readings are not within their typical range, any equipment is observed to be malfunctioning, or the system is not performing within specifications, maintenance and repair as per the Operation and Maintenance Plan are required immediately, and the SSDS restarted.

4.3.4 System Monitoring Devices and Alarms

The SSDS does not have a warning device to indicate that the system is not operating properly. In the event that the SSDS is not operating properly during a quarterly inspection, applicable maintenance and repairs will be conducted, as specified in

the Operation and Maintenance Plan, and the SSDS restarted. Operational problems will be noted in the subsequent Periodic Review Report.

4.4 MAINTENANCE AND PERFORMANCE MONITORING REPORTING REQUIREMENTS

Maintenance reports and any other information generated during regular operations at the site will be kept on-file on-site. All reports, forms, and other relevant information generated will be available upon request to the NYSDEC and submitted as part of the Periodic Review Report, as specified in the Section 5 of this SMP.

4.4.1 Routine Maintenance Reports

Checklists or forms (see Appendix C) will be completed during each routine maintenance event. Checklists/forms will include, but not be limited to the following information:

- Date;
- Name, company, and position of person(s) conducting maintenance activities;
- Maintenance activities conducted;
- Any modifications to the system;
- Where appropriate, color photographs or sketches showing the approximate location of any problems or incidents noted (included either on the checklist/form or on an attached sheet); and,
- Other documentation such as copies of invoices for maintenance work, receipts for replacement equipment, etc., (attached to the checklist/form).

4.4.2 Non-Routine Maintenance Reports

During each non-routine maintenance event, a form will be completed which will include, but not be limited to, the following information:

- Date;

- Name, company, and position of person(s) conducting non-routine maintenance/repair activities;
- Presence of leaks;
- Date of leak repair;
- Other repairs or adjustments made to the system;
- Where appropriate, color photographs or sketches showing the approximate location of any problems or incidents (included either on the form or on an attached sheet); and,
- Other documentation such as copies of invoices for repair work, receipts for replacement equipment, etc. (attached to the checklist/form).

5. INSPECTIONS, REPORTING AND CERTIFICATIONS

5.1 SITE INSPECTIONS

5.1.1 Inspection Frequency

All inspections will be conducted at the frequency specified in the schedules provided in Section 3 Monitoring Plan and Section 4 Operation and Maintenance Plan of this SMP. At a minimum, a site-wide inspection will be conducted annually. Inspections of remedial components will also be conducted when a breakdown of any treatment system component has occurred or whenever a severe condition has taken place, such as an erosion or flooding event that may affect the ECs.

5.1.2 Inspection Forms, Sampling Data, and Maintenance Reports

All inspections and monitoring events will be recorded on the appropriate forms for their respective system which are contained in Appendix C. Additionally, a general site-wide inspection form will be completed during the site-wide inspection (see Appendix C). These forms are subject to NYSDEC revision.

All applicable inspection forms and other records, including all media sampling data and system maintenance reports, generated for the site during the reporting period will be provided in electronic format in the Periodic Review Report.

5.1.3 Evaluation of Records and Reporting

The results of the inspection and site monitoring data will be evaluated as part of the EC/IC certification to confirm that the:

- EC/ICs are in place, are performing properly, and remain effective;
- The Monitoring Plan is being implemented;
- Operation and maintenance activities are being conducted properly; and, based on the above items,

- The site remedy continues to be protective of public health and the environment and is performing as designed in the RAWP and FER.

5.2 CERTIFICATION OF ENGINEERING AND INSTITUTIONAL CONTROLS

After the last inspection of the reporting period, a qualified environmental professional will prepare the following certification:

For each institutional or engineering control identified for the site, I certify that all of the following statements are true:

- The inspection of the site to confirm the effectiveness of the institutional and engineering controls required by the remedial program was performed under my direction;
- The institutional control and/or engineering control employed at this site is unchanged from the date the control was put in place, or last approved by the Department;
- Nothing has occurred that would impair the ability of the control to protect the public health and environment;
- Nothing has occurred that would constitute a violation or failure to comply with any site management plan for this control;
- Access to the site will continue to be provided to the Department to evaluate the remedy, including access to evaluate the continued maintenance of this control;
- If a financial assurance mechanism is required under the oversight document for the site, the mechanism remains valid and sufficient for the intended purpose under the document;
- Use of the site is compliant with the environmental easement;
- The engineering control systems are performing as designed and are effective;
- 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
- The information presented in this report is accurate and complete.

- I certify that all 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, Bruce Nelson, of ARCADIS, 855 Route 146, Suite 210, Clifton Park, New York 12065, am certifying as Owner's Designated Site Representative for the site.

The signed certification will be included in the Periodic Review Report described below.

For each institutional identified for the site, I certify that all of the following statements are true:

- The institutional control employed at this site is unchanged from the date the control was put in place, or last approved by the Department;
- Nothing has occurred that would impair the ability of the control to protect the public health and environment;
- Nothing has occurred that would constitute a violation or failure to comply with any site management plan for this control;
- Access to the site will continue to be provided to the Department to evaluate the remedy, including access to evaluate the continued maintenance of this control;
- If a financial assurance mechanism is required under the oversight document for the site, the mechanism remains valid and sufficient for the intended purpose under the document;
- Use of the site is compliant with the environmental easement.
- The information presented in this report is accurate and complete.
- I certify that all 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, Bruce Nelson, of ARCADIS, 855 Route 146, Suite 210, Clifton Park, New York 12065, am certifying as Owner's Designated Site Representative for the site.

5.3 PERIODIC REVIEW REPORT

A Periodic Review Report will be submitted to the Department every fifth year, beginning eighteen months after the Site Management Plan is approved. In the event that the site is subdivided into separate parcels with different ownership, a single Periodic Review Report will be prepared that addresses the site described in Appendix A (Metes and Bounds) of this SMP. The report will be prepared in accordance with NYSDEC DER-10 and submitted within 45 days of the end of each certification period. The report will include:

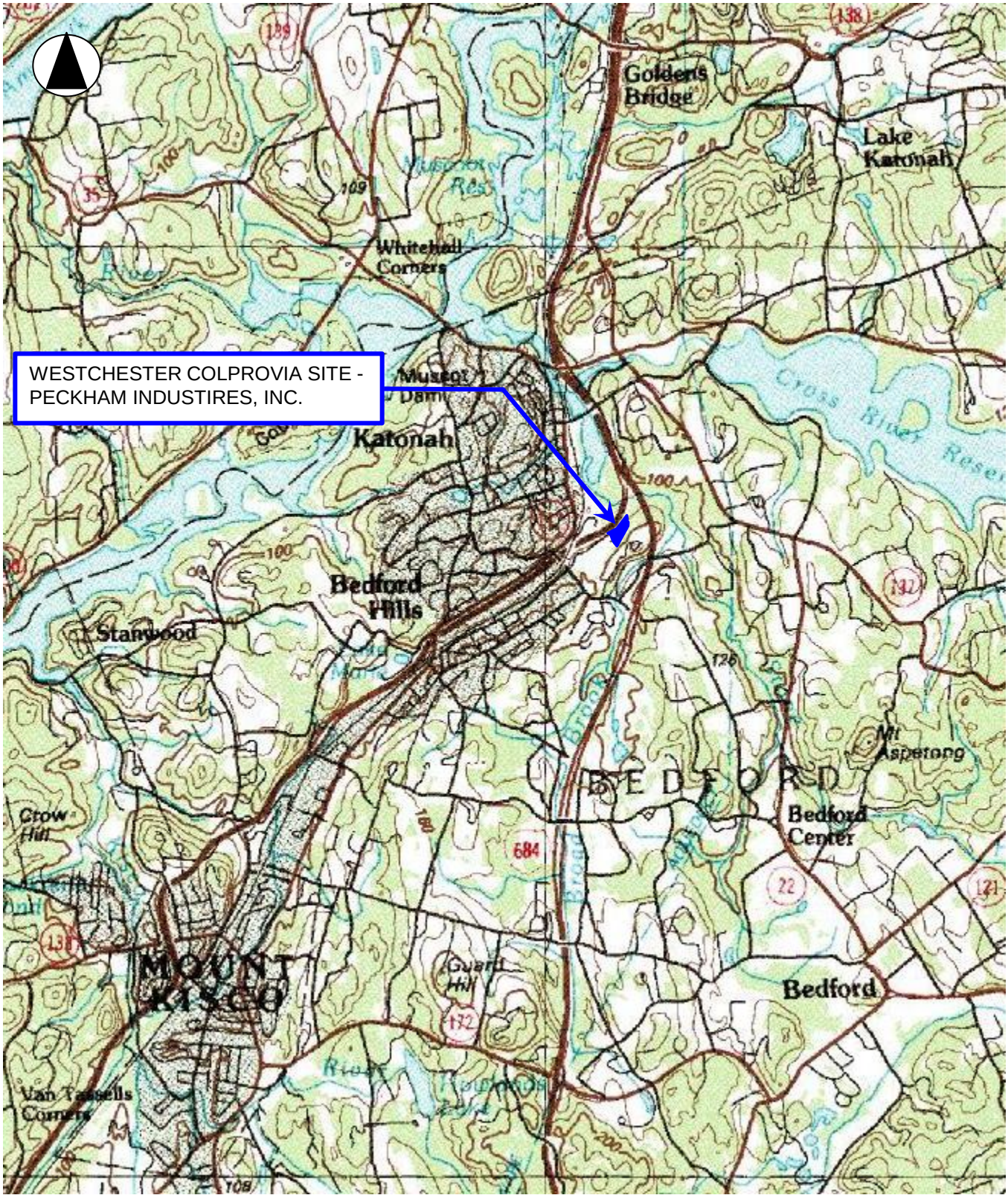
- Identification, assessment and certification of all ECs required by the remedy for the site;
- Results of the required annual site inspections and severe condition inspections, if applicable;
- All applicable inspection forms and other records generated for the site during the reporting period in electronic format;
- A summary of any discharge monitoring data and/or information generated during the reporting period with comments and conclusions;
- Data summary tables and graphical representations of contaminants of concern by media (groundwater, soil vapor), which include a listing of all compounds analyzed, along with the applicable standards, with all exceedances highlighted. These will include a presentation of past data as part of an evaluation of contaminant concentration trends;
- Results of all analyses, copies of all laboratory data sheets, and the required laboratory data deliverables for all samples collected during the reporting period will be submitted electronically in a NYSDEC-approved format;
- A site evaluation, which includes the following:
    - The compliance of the remedy with the requirements of the site-specific RAWP, ROD or Decision Document;
    - The operation and the effectiveness of all treatment units, etc., including identification of any needed repairs or modifications;

- Any new conclusions or observations regarding site contamination based on inspections or data generated by the Monitoring Plan for the media being monitored;
- Recommendations regarding any necessary changes to the remedy and/or Monitoring Plan; and
- The overall performance and effectiveness of the remedy.

The Periodic Review Report will be submitted, in electronic format only, to the NYSDEC Central Office and Regional Office in which the site is located, and the NYSDOH Bureau of Environmental Exposure Investigation.

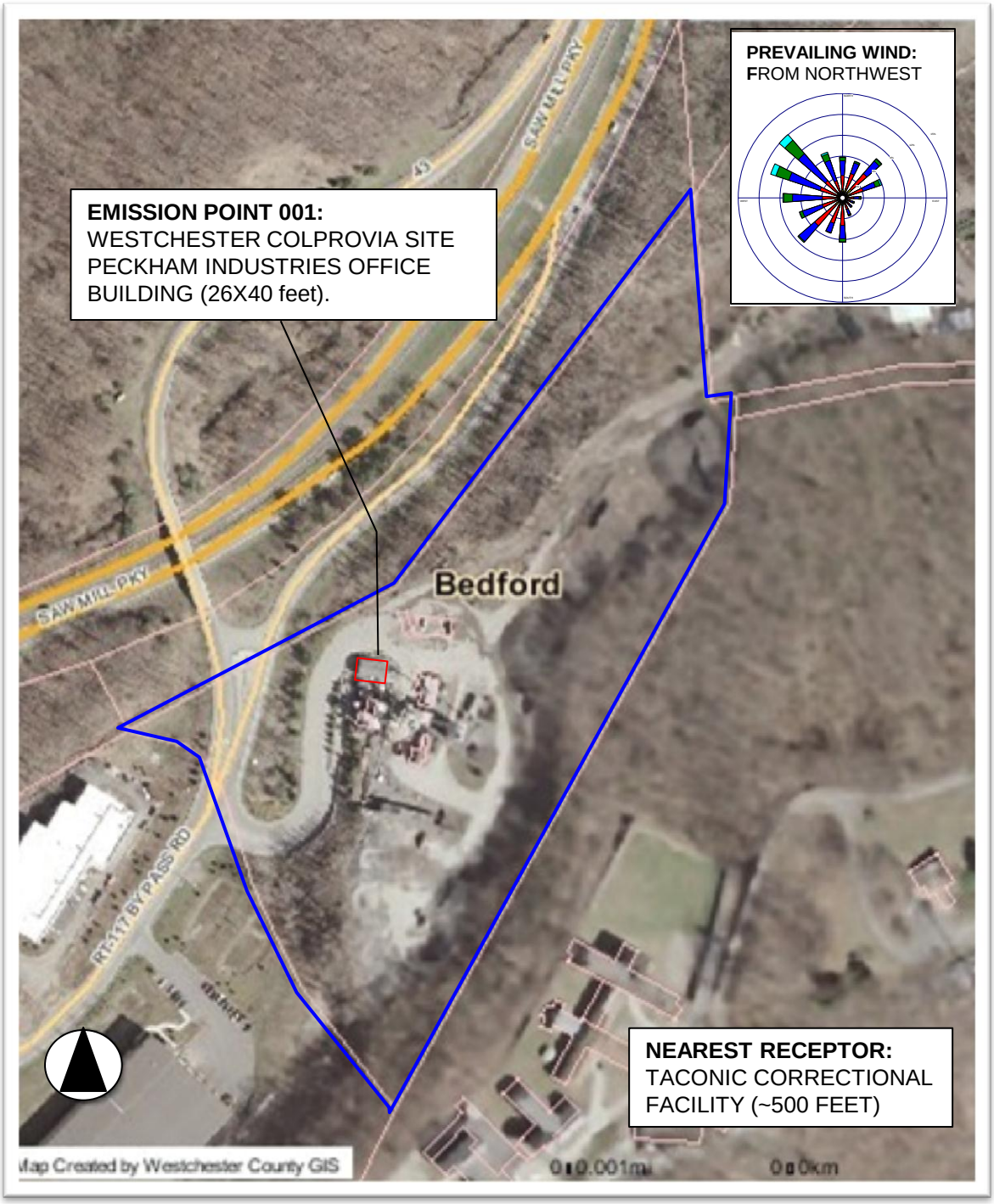
5.4 CORRECTIVE MEASURES PLAN

If any component of the remedy is found to have failed, or if the periodic certification cannot be provided due to the failure of an institutional or engineering control, a corrective measures plan will be submitted to the NYSDEC for approval. This plan will explain the failure and provide the details and schedule for performing work necessary to correct the failure. Unless an emergency condition exists, no work will be performed pursuant to the corrective measures plan until it is approved by the NYSDEC.



ONE INCH = APROXIMATELY ONE MILE

MALCOLM PIRNIE	WESTCHESTER COLPROVIA SITE - NYSDEC SITE No. 360018 PECKHAM INDUSTRIES - BEDFORD HILLS, NEW YORK **SITE LOCATION**	**OCTOBER 2008** **FIGURE 1**



ONE INCH = APROXIMATELY 250 FEET

PROPERTY BOUNDARY

SOURCES:
AERIAL IMAGE AND TAX PARCEL DATA - WESTCHESTER COUNTY GIS
WIND ROSE - http://www.wcc.nrcs.usda.gov/climate/windrose.html

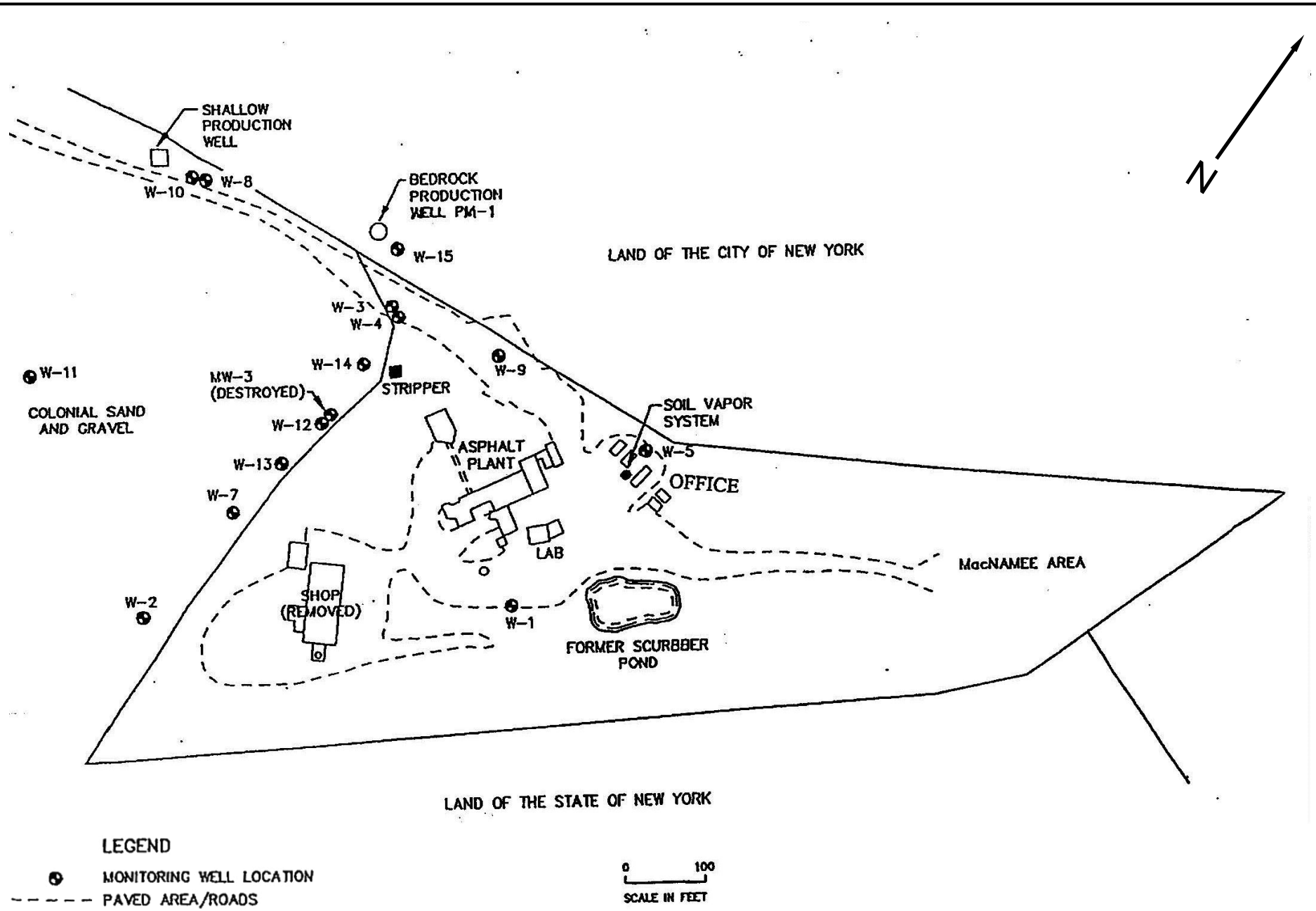
MALCOLM PIRNIE

WESTCHESTER COLPROVIA SITE - NYSDEC SITE No. 360018
PECKHAM INDUSTRIES - BEDFORD HILLS, NEW YORK

SITE PLAN

OCTOBER 2008

FIGURE 2



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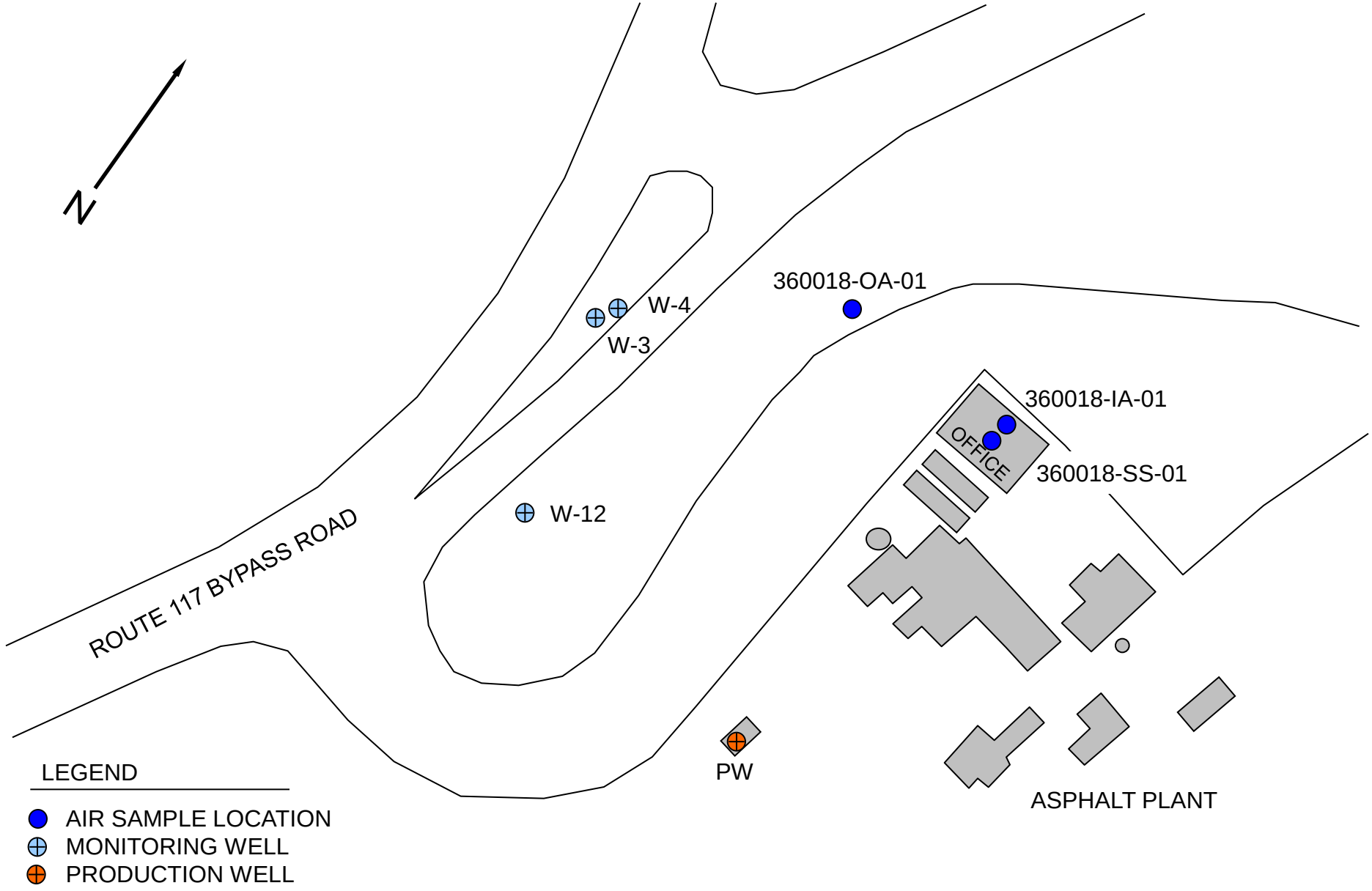
WESTCHESTER COLPROVIA
BEDFORD HILLS, NEW YORK
NYSDEC SITE NUMBER 360018

SITE CONDITIONS DURING IRMs

FEBRUARY 2012

FIGURE 3

H:\PROJECT\4376005\FILE\SMP Proposal\Site Map.ppt



SOURCE: AZIMUTH SURVEYING CARTOGRAPHY
BEDFORD HILL SITE (SITE 2) TOPOGRAPHIC SURVEY, 12/2/2004

APPROXIMATE SCALE
ONE INCH = 80 FEET

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WESTCHESTER COLPROVIA
BEDFORD HILLS, NEW YORK
NYSDEC SITE NUMBER 360018

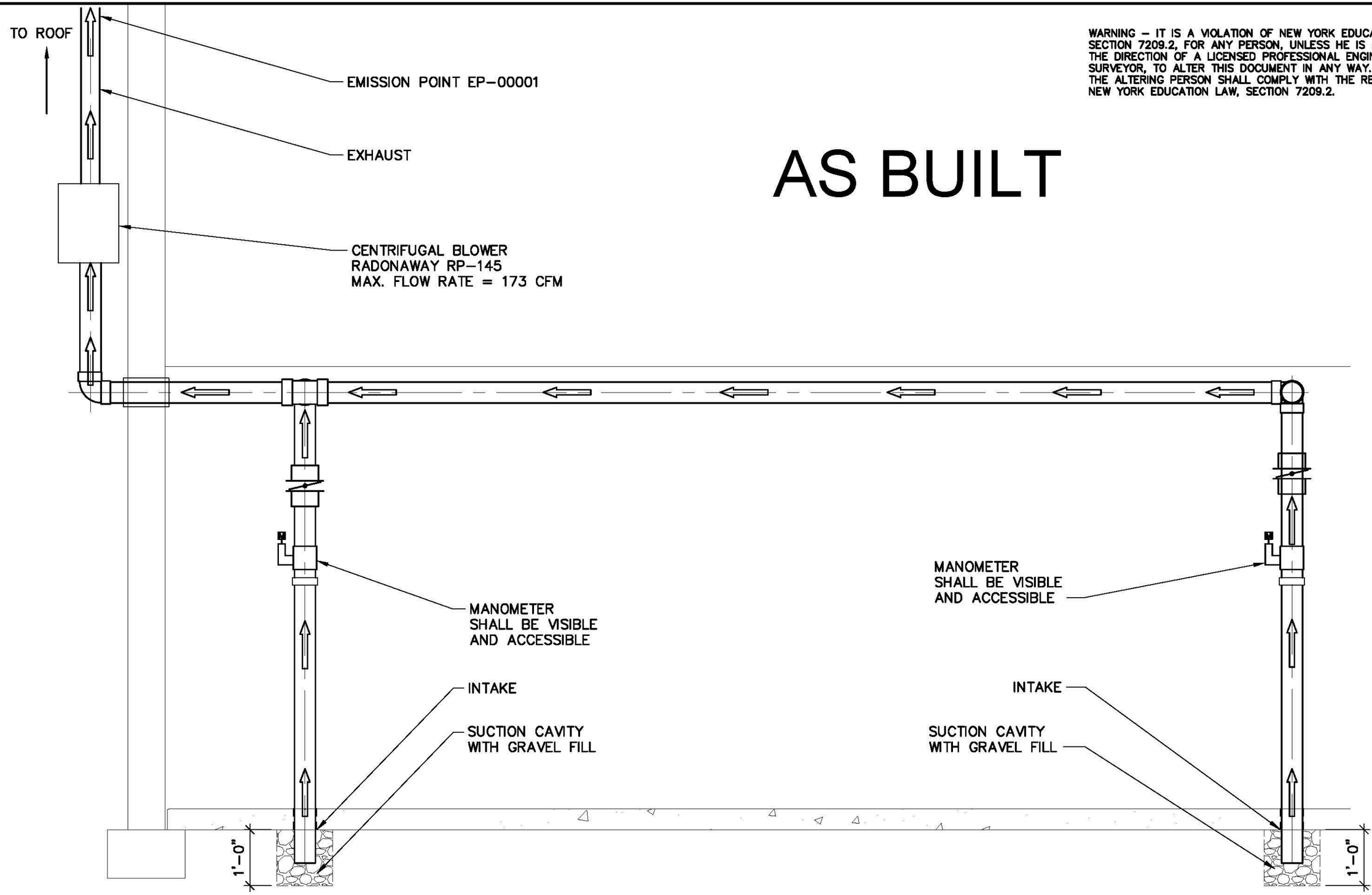
WELL & 2008 AIR SAMPLING LOCATIONS

FEBRUARY 2012

FIGURE 4

F:\PROJECT\4376003\FILE\SITE MAP & FLOOR PLAN.PPT

AS BUILT



MALCOLM PIRNIE

REVISIONS			
NO.	BY	DATE	REMARKS

DES JRW
DRN JM
CHD

WESTCHESTER–COLPROVIA SITE
BEDFORD, NY

SUB–SLAB DEPRESSURIZATION SYSTEM

NYSDEC SITE NUMBER 360018

FIGURE 5
PROCESS FLOW DIAGRAM

NOT TO SCALE

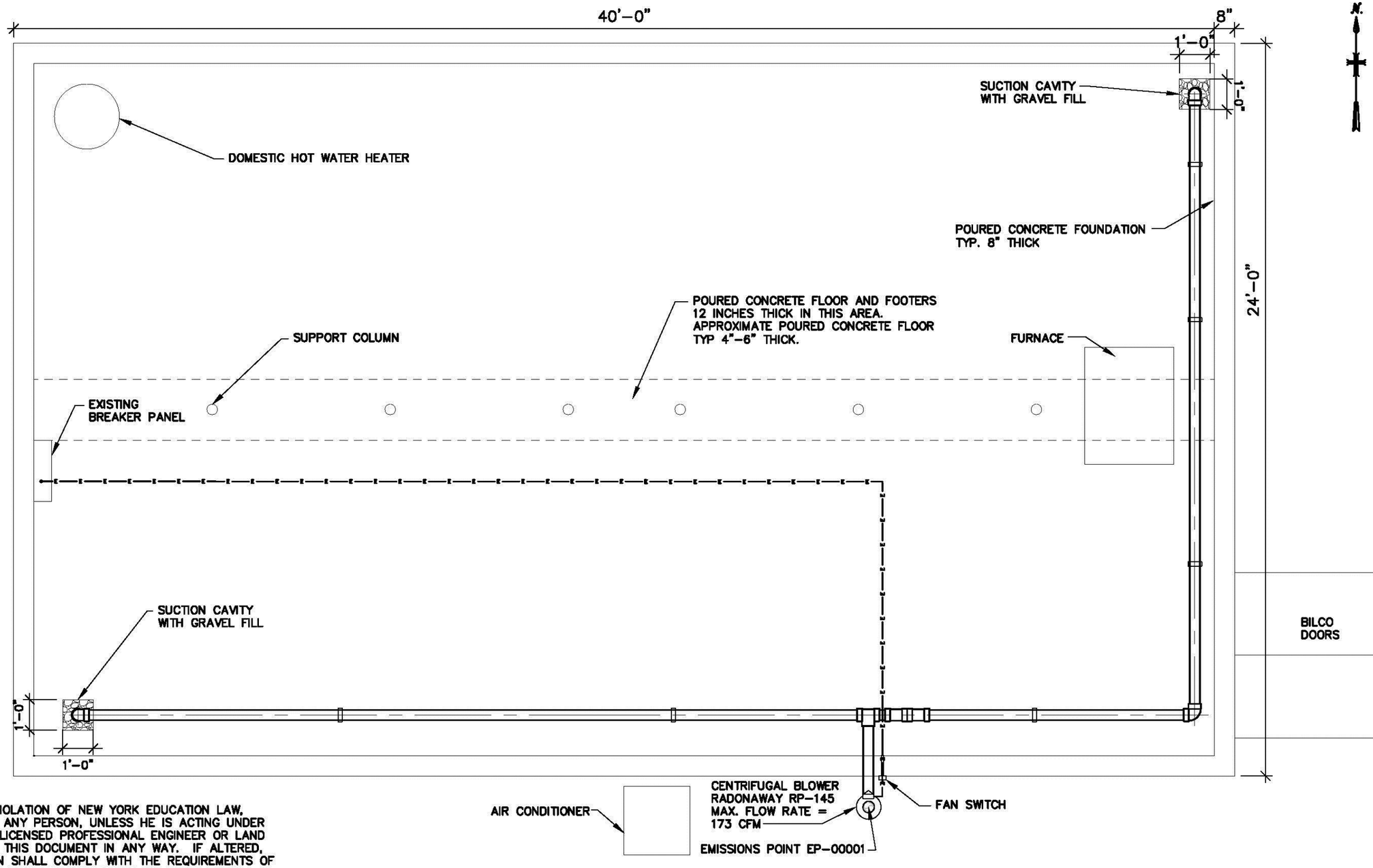
DATE OCTOBER 2009

SK SHEET 1 OF 1

CAD REF. NO. 4376003

XREFS: IMAGES:None
User:Lewandowski Spec:PIRNIE STANDARD File:I:\ACAD\PROJ\4376\003\SSDS AS BUILTS.DWG Scale:1:1 Date:10/15/2009 Time:10:57 Layout:Fig 3

AS BUILT



WARNING – IT IS A VIOLATION OF NEW YORK EDUCATION LAW, SECTION 7209.2, FOR ANY PERSON, UNLESS HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER OR LAND SURVEYOR, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION LAW, SECTION 7209.2.

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DWN JM
CHD

WESTCHESTER–COLPROVIA SITE
BEDFORD, NY

SUB–SLAB DEPRESSURIZATION SYSTEM

NYSDEC SITE NUMBER 360018

FIGURE 6
BASEMENT PLAN VIEW

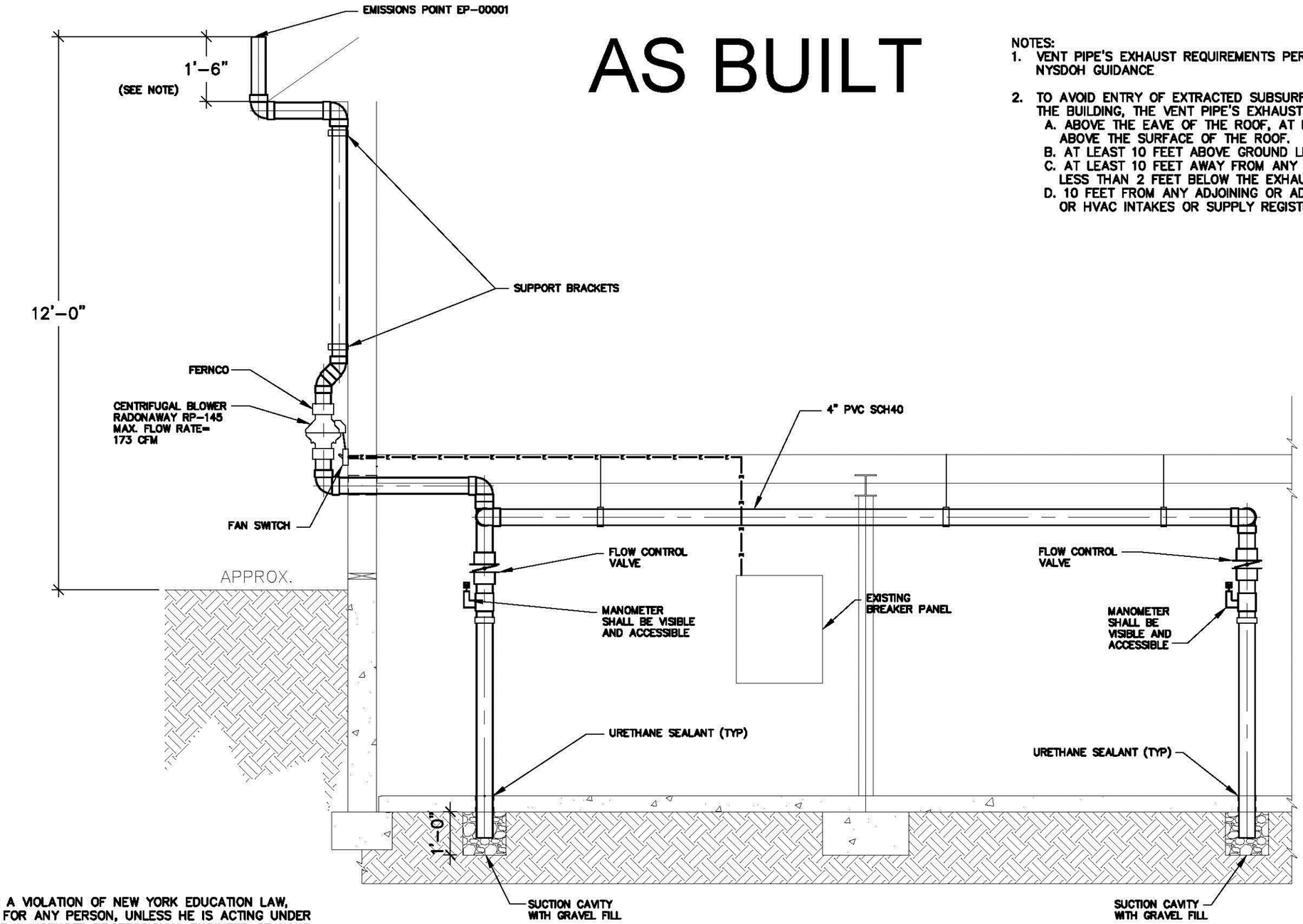
SCALE: 1"=40'

DATE OCTOBER 2009

SK SHEET 1 OF 1

CAD REF. NO. 4376003

AS BUILT



NOTES:
1. VENT PIPE'S EXHAUST REQUIREMENTS PER OCTOBER 2006 NYSDOH GUIDANCE
2. TO AVOID ENTRY OF EXTRACTED SUBSURFACE VAPORS INTO THE BUILDING, THE VENT PIPE'S EXHAUST SHOULD BE:
   A. ABOVE THE EAVE OF THE ROOF, AT LEAST 12 INCHES ABOVE THE SURFACE OF THE ROOF.
   B. AT LEAST 10 FEET ABOVE GROUND LEVEL
   C. AT LEAST 10 FEET AWAY FROM ANY OPENING THAT IS LESS THAN 2 FEET BELOW THE EXHAUST POINT, AND
   D. 10 FEET FROM ANY ADJOINING OR ADJACENT BUILDINGS, OR HVAC INTAKES OR SUPPLY REGISTERS.

MALCOLM PIRNIE

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WESTCHESTER–COLPROVIA SITE
BEDFORD, NY

SUB–SLAB DEPRESSURIZATION SYSTEM

NYSDEC SITE NUMBER 360018

FIGURE 7
ELEVATION VIEW

SCALE: 1"=40'

DATE OCTOBER 2009

SK SHEET 1 OF 1

CAD REF. NO. 4376003

TABLE 1
SUMMARY OF GROUNDWATER ANALYTICAL RESULTS (VOCS)
WESTCHESTER COLPROVIA
BEDFORD HILLS, NEW YORK
NYSDEC SITE NUMBER 360018

Sample ID Sampling Date Matrix Units	NYSDEC GA Standard ug/L	W-3 2/28/2008 WATER ug/L	W-4 2/28/2008 WATER ug/L	W-12 2/28/2008 WATER ug/L
Volatile Organic Compounds				
1,1,1-Trichloroethane	5	5 U	5 U	5 U
1,1,2,2-Tetrachloroethane	5	5 U	5 U	5 U
1,1,2-Trichloroethane	1	5 U	5 U	5 U
1,1-Dichloroethane	5	5 U	5 U	5 U
1,1-Dichloroethene	5	5 U	5 U	5 U
1,2-Dichloroethane	0.6	5 U	5 U	5 U
1,2-Dichloropropane	5	5 U *	5 U *	5 U *
2-Butanone (MEK)	50	10 U	10 U	10 U
2-Hexanone		10 U	10 U	10 U
4-Methyl-2-pentanone (MIBK)		10 U	10 U	10 U
Acetone		10 U	10 U	10 U
Benzene	1	5 U	5 U	5 U
Bromodichloromethane	50	5 U	5 U	5 U
Bromoform		5 U	5 U	5 U
Bromomethane	5	5 U *	5 U *	5 U *
Carbon disulfide		5 U	5 U	5 U
Carbon tetrachloride	5	5 U	5 U	5 U
Chlorobenzene	5	5 U	5 U	5 U
Chloroethane	5	5 U	5 U	5 U
Chloroform	7	5 U	5 U	5 U
Chloromethane		5 U	5 U	5 U
cis-1,2-Dichloroethene	5	5 U	5 U	5 U
cis-1,3-Dichloropropene	0.4	5 U	5 U	5 U
Dibromochloromethane	50	5 U	5 U	5 U
Ethylbenzene	5	5 U	5 U	5 U
Methylene Chloride	5	5 U	5 U	5 U
Styrene	5	5 U	5 U	5 U
Tetrachloroethene	5	5 U	5 U	5 U
Toluene	5	5 U	5 U	5 U
trans-1,2-Dichloroethene	5	5 U	5 U	5 U
trans-1,3-Dichloropropene	0.4	5 U	5 U	5 U
Trichloroethene	5	0.89 J	3.3 J	3.5 J
Vinyl chloride	2	5 U	5 U	5 U
Xylenes, Total	5	5 U	5 U	5 U

Notes
(1) - Sample W-FD is a duplicate from W-12.
U - Not detected at the indicated concentration.
J - Estimated concentration.
M - Manually integrated compound.
* - Laboratory MS or MSD exceeded control limits.

TABLE 1
SUMMARY OF GROUNDWATER ANALYTICAL RESULTS (VOCS)
WESTCHESTER COLPROVIA
BEDFORD HILLS, NEW YORK
NYSDEC SITE NUMBER 360018

Sample ID Sampling Date Matrix Units	NYSDEC GA Standard ug/L	W-FD[(1)] 2/28/2008 WATER ug/L	PW 2/28/2008 WATER ug/L	TRIP BLANK 2/28/2008 WATER ug/L
Volatile Organic Compounds				
1,1,1-Trichloroethane	5	5 U	5 U	5 U
1,1,2,2-Tetrachloroethane	5	5 U	5 U	5 U
1,1,2-Trichloroethane	1	5 U	5 U	5 U
1,1-Dichloroethane	5	5 U	5 U	5 U
1,1-Dichloroethene	5	5 U	5 U	5 U
1,2-Dichloroethane	0.6	5 U	5 U	5 U
1,2-Dichloropropane	5	5 U *	5 U	5 U
2-Butanone (MEK)	50	10 U	10 U	10 U
2-Hexanone		10 U	10 U	10 U
4-Methyl-2-pentanone (MIBK)		10 U	10 U	10 U
Acetone		10 U	10 U	1.6 JM
Benzene	1	5 U	5 U	5 U
Bromodichloromethane	50	5 U	5 U	5 U
Bromoform		5 U	5 U	5 U
Bromomethane	5	5 U *	5 U	5 U
Carbon disulfide		5 U	5 U	5 U
Carbon tetrachloride	5	5 U	5 U	5 U
Chlorobenzene	5	5 U	5 U	5 U
Chloroethane	5	5 U	5 U	5 U
Chloroform	7	5 U	5 U	5 U
Chloromethane		5 U	5 U	5 U
cis-1,2-Dichloroethene	5	5 U	5 U	5 U
cis-1,3-Dichloropropene	0.4	5 U	5 U	5 U
Dibromochloromethane	50	5 U	5 U	5 U
Ethylbenzene	5	5 U	5 U	5 U
Methylene Chloride	5	5 U	0.39 J	0.6 J
Styrene	5	5 U	5 U	5 U
Tetrachloroethene	5	5 U	5 U	5 U
Toluene	5	5 U	5 U	5 U
trans-1,2-Dichloroethene	5	5 U	5 U	5 U
trans-1,3-Dichloropropene	0.4	5 U	5 U	5 U
Trichloroethene	5	3.2 J	5 U	5 UM
Vinyl chloride	2	5 U	5 U	5 U
Xylenes, Total	5	5 U	5 U	5 U

Notes
(1) - Sample W-FD is a duplicate from W-12.
U - Not detected at the indicated concentration.
J - Estimated concentration.
M - Manually integrated compound.
* - Laboratory MS or MSD exceeded control limits.

TABLE 2
SUMMARY OF GROUNDWATER NATURAL ATTENUATION AND FIELD PARAMETERS
WESTCHESTER COLPROVIA
BEDFORD HILLS, NEW YORK
NYSDEC SITE NUMBER 360018

Sample ID Sampling Date Matrix	Units	W-3 2/28/2008 WATER	W-4 2/28/2008 WATER	W-12 2/28/2008 WATER	PW 2/28/2008 WATER
Natural Attenuation Parameters					
Ferrous Iron	mg/L	0.5 UHF	0.5 UHF	0.5 UHF	0.5 UHF
Alkalinity	mg/L	407	229	211	74.9
Dissolved Organic Carbon	mg/L	1.3	0.67 J	1.3	0.46 J
Chloride	mg/L	300	113	143	33.5
Nitrate Nitrite as N	mg/L	0.5 U	2.7	1.8	0.1 U
Sulfate	mg/L	104	232	413	48.2
Methane	ug/L	2.0 U	2.0 U	2.0 U	2.0 U
Ethane	ug/L	4.0 U	4.0 U	4.0 U	4.0 U
Ethene	ug/L	3.0 U	3.0 U	3.0 U	3.0 U
Field Parameters					
pH	su	6.84	7.16	6.66	NM
Conductivity	mho/cm	2.24	1.37	1.68	NM
Turbidity	NTU	26.3	132	10.6	NM
Dissolved Oxygen	mg/L	3	0	0	NM
Temperature	°C	8.67	10.3	11.11	NM
REDOX	mV	151	154	166	NM

Notes

U - Not detected at the indicated quantitation limit.

HF - Field parameter holding time of 15 minutes.

J - Sample results greater than method detection limit (MDL) but less than contract required detection limit (CRDL).

NM - Not measured

TABLE 3
SOIL VAPOR INTRUSION SAMPLE RESULTS SUMMARY
WESTCHESTER COLPROVIA
BEDFORD HILLS, NEW YORK

Sample ID Dilution Factor Sample Type Date Units	USEPA Draft Shallow Soil Gas Vapor Intrusion Guidance [(1)] ug/m3	NYSDOH Soil Vapor Intrusion Guidance ug/m3	360018-SS-01 25 Sub-slab 2/28/2008 ug/m^3	360018-IA-01 1 Indoor Air 2/28/2008 ug/m^3	360018-OA-01 2.5 Outdoor Air 2/28/2008 ug/m^3
VOCs (TO-15)					
1,1,1-Trichloroethane	22,000	1,000	**1,100**	0.44 U	1.1 U
1,2,4-Trimethylbenzene	60		9.8 U	0.39 U	**2.8**
1,3,5-Trimethylbenzene	60		9.8 U	0.39 U	**1.0**
Benzene	312		6.4 U	**0.44**	**0.65**
Chloromethane			10 U	**1.4**	**1.3**
Dichlorodifluoromethane	200		**14**	**3.2**	**3.5**
Methylene Chloride	5,200	60	17 U	**2.7**	1.7 U
Trichloroethene	22	5	**15**	**0.30**	0.54 U
Trichlorofluoromethane	7,000		**89**	**1.5**	**1.5**

Notes:

"Mitigate" based on NYSDOH Guidance for Evaluating Soil Vapor Intrusion (Soil Vapor / Indoor Air Matrix 2)

"Monitor" based on NYSDOH Guidance for Evaluating Soil Vapor Intrusion (Soil Vapor / Indoor Air Matrix 1)

(1) - corresponds to a target indoor air concentration for carcinogens based on a target cancer risk of 10^{-4} (1 in 10,000)

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Appendix A

W 295 - Statutory Form K.
Release of Part of Mortgaged Premises.
Individual or Corporation.

JULIUS BLUMBERG, INC., LAW BLANK PUBLISHERS,
80 EXCHANGE PLACE AT BROADWAY, NEW YORK

THIS IS A LEGAL INSTRUMENT AND SHOULD BE EXECUTED UNDER SUPERVISION OF AN ATTORNEY

This Indenture,

Made the 1st *day of* February *Nineteen hundred and* eighty-nine

Between O & G INDUSTRIES, INC., a Connecticut business corporation with an office at 112 Wall Street, P.O. Box 907 Torrington, CT 06790

party of the first part,

and

PECKHAM MATERIALS CORP., a New York business corporation with an office at 20 Haarlem Avenue White Plains, NY 10603

party of the second part,

Whereas, O & G Colprovia, Inc.

by Indenture of Mortgage, bearing date the 17th *day of* August *nineteen hundred and* eighty-seven *recorded in the office of the* *of the County of* *, in Liber* *of Mortgages, of Section* *page* *, on the* *day of* *nineteen hundred and* *, for the consideration therein mentioned, and to secure the payment of the money therein specified, did mortgage certain lands and tenements, of which the lands hereinafter described are part, unto* O & G Industries, Inc.

And Whereas, *the party of the first part, at the request of the party of the second part, has agreed to give up and surrender the lands hereinafter described unto the party of the second part, and to hold and retain the residue of the mortgaged lands as security for the money remaining due on said mortgage.*

Now this Indenture Witnesseth, *that the party of the first part, in pursuance of said agreement, and in consideration of* ----------

----------ONE DOLLAR ($1.00)----------*Dollars; lawful money of the United States paid by the party of the second part, does grant, release and quitclaim unto the party of the second part, all that part of said mortgaged lands described as follows:*

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

BEGINNING at a point on the northeasterly corner of premises being described herein, where the same is intersected by the northwesterly corner of land of the People of the State of New York as shown on Appropriation Map No. 576 Parcel No. 771 and filed in the Westchester County Clerk's Office, Division of Land Records on 3/20/67 as Map No. 15269 and the southeasterly corner of land of the City of New York;

running thence along land of the People of the State of New York as shown on the above mentioned map, the following 3 courses and distances:
(1) South 34° 31' 08" East 182.58 feet;
(2) South 3° 54' 49" East 366.52 feet; and
(3) South 5° 30' 46" West 180.73 feet to land now or formerly of the Bedford Hills Correctional Facility;

thence along land now or formerly of Bedford Hills Correctional Facility and land now or formerly of Colonial Sand &Stone Co., Inc., the following 6 courses and distances:
(1) North 79° 18' 20" West 1.41 feet;
(2) North 78° 48' 20" West 117.54 feet;
(3) North 77° 43' 40" West 88.81 feet;
(4) North 80° 33' 00" West 171.14 feet;
(5) North 83° 03' 30" West 92.86 feet; and
(6) North 83° 28' 10" West 175.13 feet;

thence southwesterly along the land of the State of New York, the following 4 courses and distances:
(1) South 24° 37' 00" West 157.36 feet;
(2) South 35° 47' 00" West 416.55 feet;
(3) South 35° 54' 00" West 319.91 feet; and
(4) South 36° 31' 30" West 317.10 feet to the southwest corner of the herein described parcel;

thence in a general northwesterly direction through the land of Colonial Sand & Stone Co., Inc., the following 5 courses and distances:
(1) North 17° 49' 40" West 246.36 feet to an iron rod;
(2) North 12° 34' 46" West 157.61 feet to a pipe;
(3) North 4° 42' 13" West 173.41 feet to a pipe;
(4) North 35° 00' 42" West 69.30 feet to an iron rod; and
(5) North 74° 58' 49" West 99.55 feet to the land of the City of New York;

thence northeasterly along the land of the City of New York, the following 4 courses and distances:

(1) North 72° 24' 30" East 444.24 feet;
(2) North 45° 59' 00" East 711.25 feet;
(3) North 47° 26' 00" East 233.75 feet; and
(4) North 66° 10' 00" East 393.06 feet to the point or place of beginning.

TOGETHER with a right of way 50 feet in width over other lands of Colonial Sand and Stone Co., Inc. adjoining on the southwest to and from the above described premises to Harris Road, said right of way to be used in common with others and to remain open and unobstructed for vehicular travel and other travel of all kinds.

Together with the hereditaments and appurtenances thereunto belonging, and all the right, title and interest of the party of the first part, of, in and to the same, to the intent that the lands hereby released may be discharged from said mortgage, and that the rest of the land in said mortgage specified may remain mortgaged to the party of the first part as heretofore.

To Have and to Hold the lands and premises hereby released and quitclaimed to the part of the second part, and their own proper use, benefit and behoof, forever, free, clear and discharged of and from all lien and claim under and by virtue of the indenture of mortgage aforesaid.

In Witness Whereof, the party of the first part

In presence of:

O & G INDUSTRIES, INC.

By: _____

Title: _____

STATE OF Connecticut
COUNTY OF } ss.:

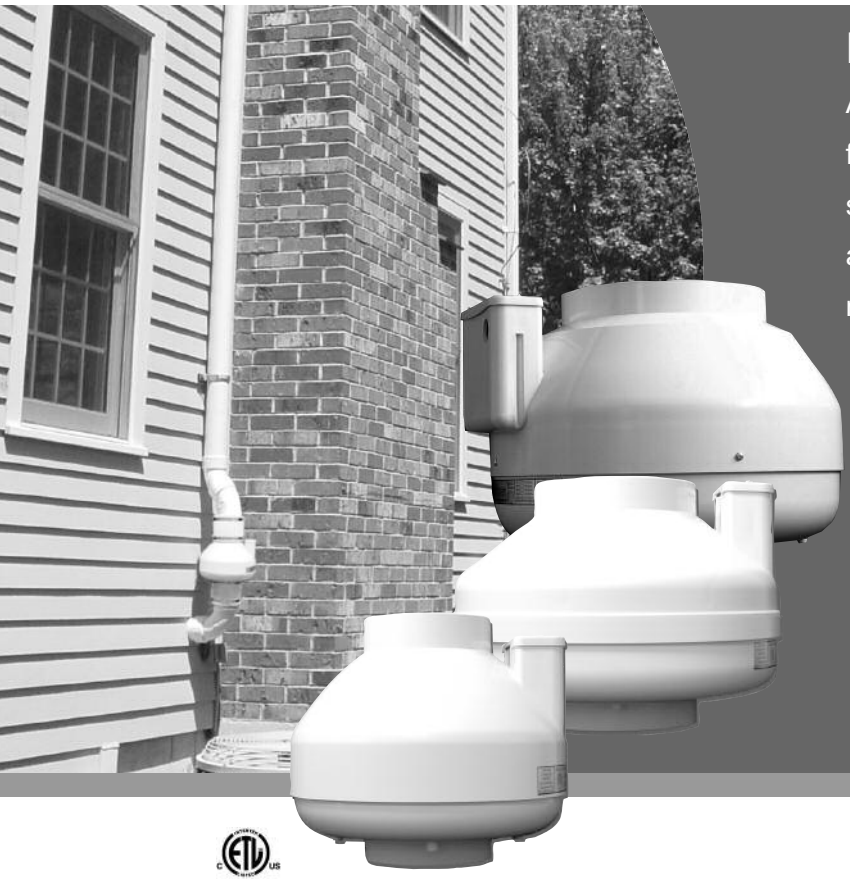
On the day of nineteen hundred and eighty-nine

ARCADIS

Appendix B

RadonAway™
The World's Leading Radon Fan Manufacturer

RP Series



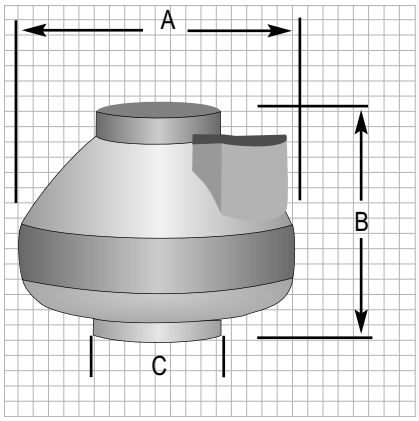
Radon Mitigation Fans

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:

- Five-year hassle-free warranty
- Quiet and attractive
- Thermally protected
- Motorized impeller
- ETL Listed - for indoor or outdoor use
- Meets all electrical code requirements
- Rated for commercial and residential use

Model	Watts	Max. Pressure "WC	Typical CFM vs. Static Pressure WC					A"	B"	C"
			0"	.5"	1.0"	1.5"	2.0"			
RP140	14-20	0.8	134	68	-	-	-	9.7	7.9	4
RP145	37-71	2.1	173	132	94	55	11	9.7	7.9	4
RP260	52-72	1.8	275	180	105	20	-	11.8	9.9	6
RP265	86-140	2.5	327	260	207	139	57	11.8	9.9	6
RP380	103-156	2.3	510	393	268	165	35	13.41	10.53	8



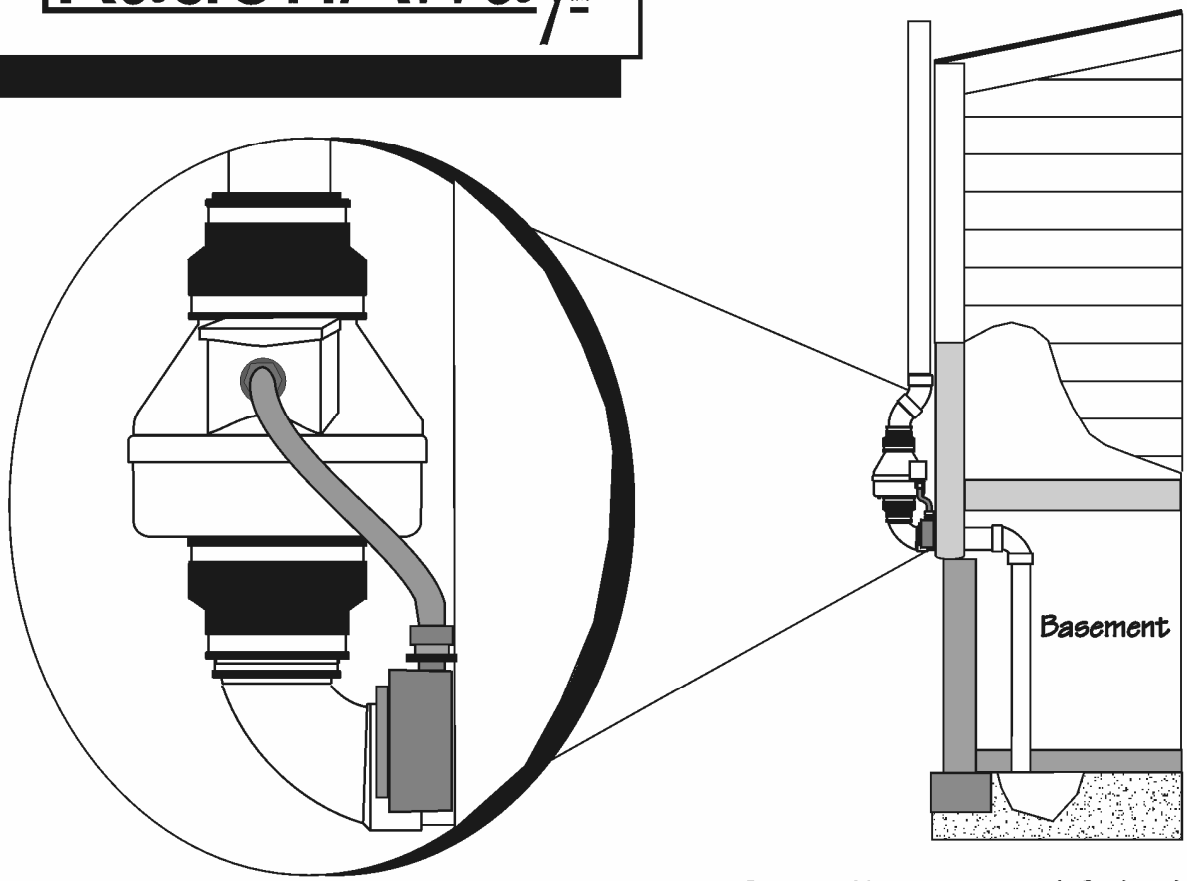
Choice of model is dependent on building characteristics including sub-slab materials and should be made by a radon professional.

For Further Information Contact:

03/08
P/N 02008

RP Series Installation Instructions

By RadonAway™



Spruce Environmental Technologies, Inc.
Ward Hill, MA P/N IN020 Rev H

Series Fan Installation 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.

1. **WARNING!** Do not use fan in hazardous environments where fan electrical system could provide ignition to combustible or flammable materials.

2. **WARNING!** Do not use fan to pump explosive or corrosive gases.

3. **WARNING!** Check voltage at the fan to insure it corresponds with nameplate.

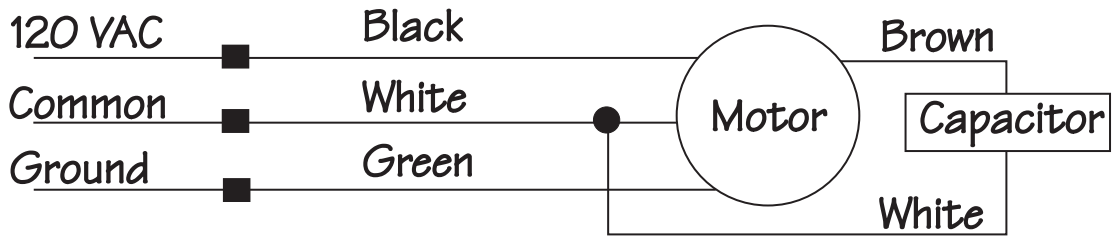
4. **WARNING!** Normal operation of this device may affect the combustion airflow needed for safe operation of fuel burning equipment. Check for possible backdraft conditions on all combustion devices after installation.

5. **NOTICE!** There are no user serviceable parts located inside the fan unit.
Do NOT attempt to open. Return unit to the factory for service.

6. 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

7. **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.

DynaVac RP Series Fan Wiring Diagram



1.0 SYSTEM DESIGN CONSIDERATIONS

1.1 INTRODUCTION

The DynaVac RP Series Radon Fans are intended for use by trained, professional Radon mitigators. The purpose of this instruction is to provide additional guidance for the most effective use of a DynaVac Fan. This instruction should be considered as a supplement to EPA 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 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.

1.3 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.

1.4 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.

1.5 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.

1.6 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.

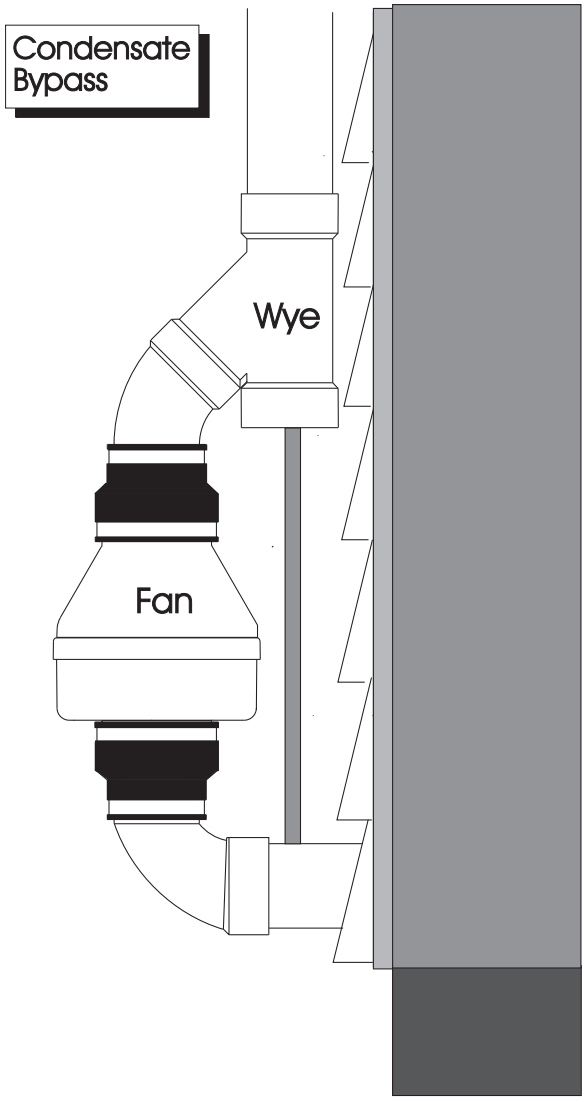
For RP Series Fan piping, the following table provides the minimum recommended pipe diameter and pitch under several system conditions.

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 0n 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.

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.



1.7 "SYSTEM ON" INDICATOR

A properly designed system should incorporate a "System On" Indicator for affirmation of system operation. A manometer, such as a U-Tube, or a vacuum alarm is recommended for this purpose.

1.8 ELECTRICAL WIRING

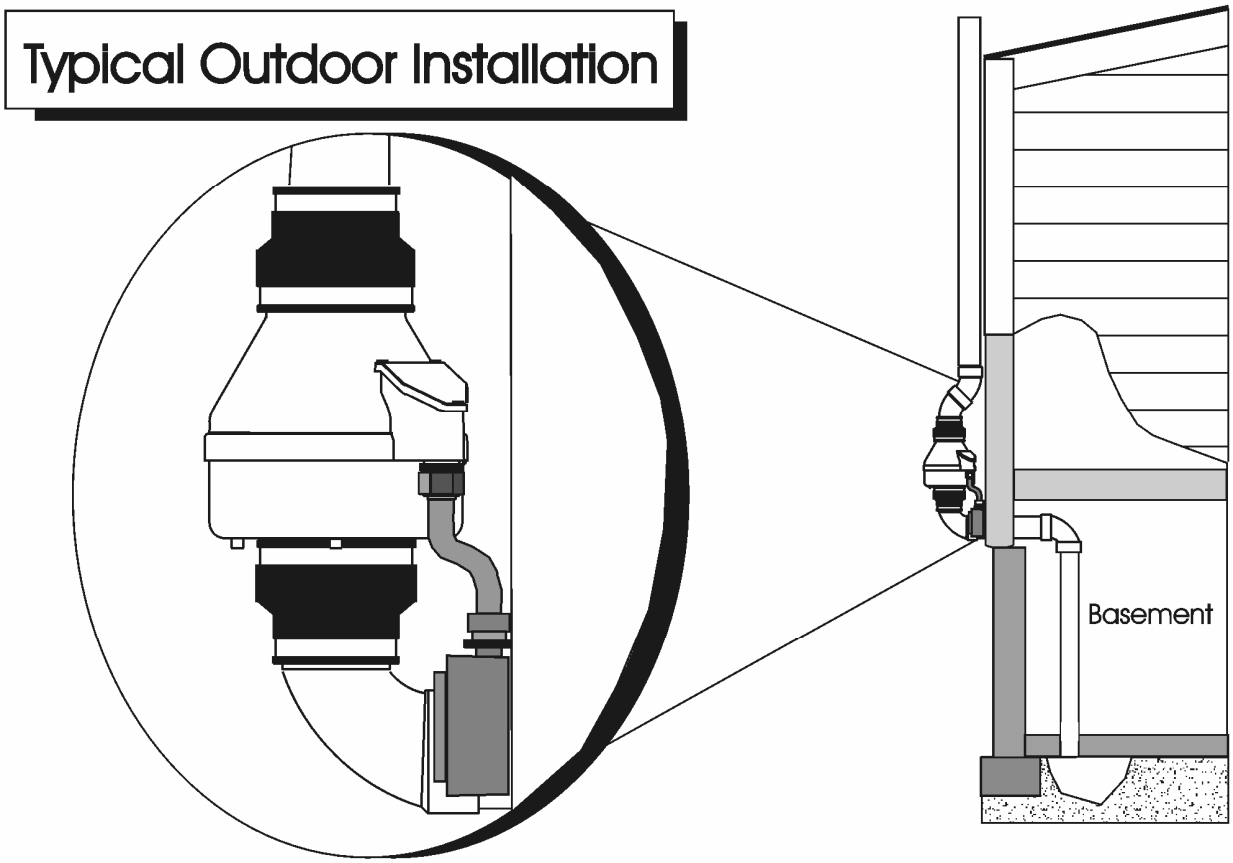
The RP Series Fans operate on standard 120V 60 Hz. AC. All wiring must be performed in accordance with the National Fire Protection Association's (NFPA)"National Electrical Code, Standard #70"-current edition for all commercial and industrial work, and state and local building codes. All wiring must 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 caulked to prevent water penetration into the box. A means, such as a weep hole, is recommended to drain the box.

1.9 SPEED CONTROLS

The RP Series Fans are rated for use with electronic speed controls ,however , they are generally not recommended.

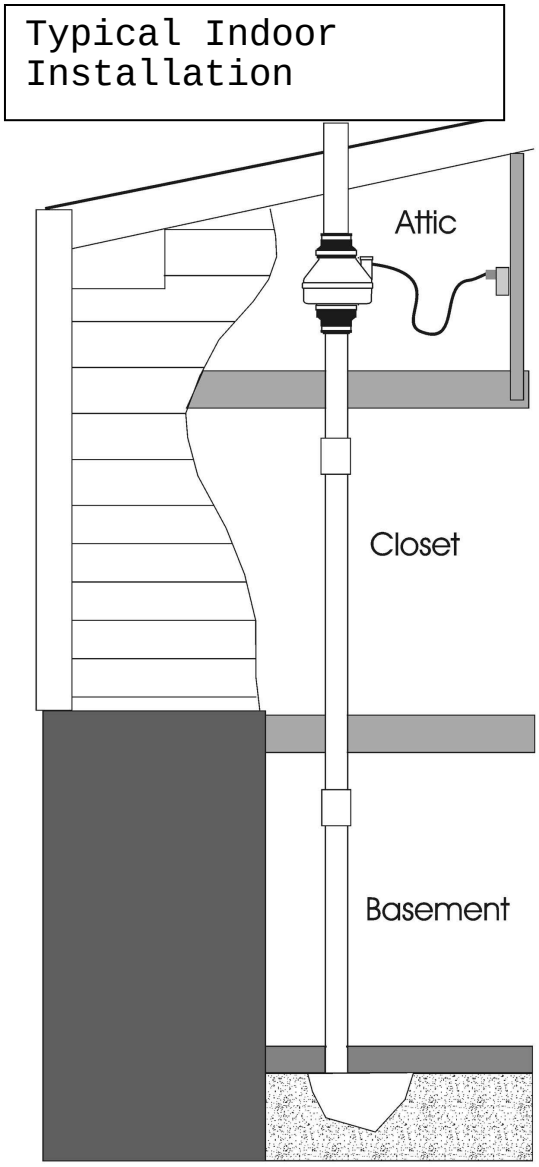
2.0 INSTALLATION

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 25007-2 (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.

2.4 ELECTRICAL CONNECTION

Connect wiring with wire nuts provided, observing proper connections:

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

_____ **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 **less than** 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	134	101	68	10	-	-	-	-	-
RP145	173	152	132	115	94	73	55	37	-
RP155	185	161	137	115	94	73	55	37	-
RP260	275	225	180	140	105	70	20	-	-
RP265	327	302	260	230	207	176	139	101	57
RP380*	420	375	330	260	220	170	130	70	30

* Tested with 6" inlet and discharge pipe.

Power Consumption 120 VAC, 60Hz 1.5 Amp Maximum		Maximum Recommended Operating Pressure* (Sea Level Operation)**	
RP140	14 - 20 watts	RP140	0.8" W.C.
RP145	37 - 71 watts	RP145	1.7" W.C.
RP155	37 - 75 watts	RP155	1.7" W.C.
RP260	52 - 72 watts	RP260	1.5" W.C.
RP265	86 - 140 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
RP140	8.5H" x 9.7" Dia.	5.5 lbs.	4.5" OD (4.0" PVC Sched 40 size compatible)
RP145	8.5H" x 9.7" Dia.	5.5 lbs.	4.5" OD (4.0" PVC Sched 40 size compatible)
RP155	8.5H" x 9.7" Dia.	5.5 lbs.	5.0" OD
RP260	8.6H" x 11.75" Dia.	5.5 lbs.	6.0" OD
RP265	8.6H" x 11.75" Dia.	6.5 lbs.	6.0" OD
RP380	10.53H" x 13.41" Dia.	11.5 lbs.	8.0" OD

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

Mounting: 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 B Insulation

Thermally protected

3000 RPM

Rated for Indoor or Outdoor Use

LISTED Electric Fan ETL® Tested to UL Std. 507
77728

IMPORTANT INSTRUCTIONS TO INSTALLER

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

WARRANTY

Subject to any applicable consumer protection legislation, RadonAway warrants that the GPX01/XP/XR/RP 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. 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 5 years from date of manufacture if the Fan is installed in a professionally designed and professionally installed radon system or installed as a replacement fan in a professionally designed and professionally installed radon system. 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.

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 cost to and from factory.

RadonAway
3 Saber Way
Ward Hill, MA 01835
TEL. (978) 521-3703
FAX (978) 521-3964

Record the following information for your records:

Serial No._____
Purchase Date_____

ARCADIS

Appendix C

SITE INSPECTION FORM

Westchester Colprovia Site
Bedford, New York

Date: _____ Weather: _____

Inspector: _____

	No	Yes
1) Is there a change in site/property use since last inspection?	____	____
2) Is there a change in building use since last inspection?	____	____
3) Is there any damage to building since last inspection?	____	____
4) Is there any damage to SSDS since last inspection?	____	____
5) Is there a change in the SSDS operation since last inspection?	____	____

Comments: *(Required for each Yes answer)*

_____

_____

_____

_____

6) Can you hear the exterior blower running?

Yes	No
_____	_____

6) Are the blue fluid levels in each manometer equal (as shown below) or unequal?

Equal	Unequal
_____	_____

Additional Comments/Concerns/Recommendations:

_____

_____

_____

_____

_____

Signed: _____ Date: _____