

Camarota Cleaners
MECHANICVILLE, NEW YORK

Site Management Plan

NYSDEC Site Number: 546044

Prepared by:

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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 Camarota Cleaners (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 State Superfund Program, Site # 546044.

1.1.1 General

The NYSDEC conducted remedial activities detailed in the Record of Decision (ROD), dated March 2010, at the site located in the City of Mechanicville, New York. A figure showing the site location and boundaries of this “site” is provided as Figure 1. The boundaries of the site are more fully described in the metes and bounds site description that is part of the Environmental Easement, which is included in Appendix A.

After completion of the remedial work described in the ROD, 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 Environmental Easement is extinguished in accordance with ECL Article 71, Title 36. 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 NYSDEC, in accordance with the requirements in NYSDEC DER-10 Technical Guidance for Site Investigation and Remediation, dated November 2009. This SMP addresses the means for implementing the Institutional Controls (ICs) and Engineering Controls (ECs) that are required by the Environmental Easement 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. An Environmental Easement granted to the NYSDEC, and recorded with the Saratoga County Clerk, requires compliance with this SMP and all ECs and ICs placed on the site. The ICs place restrictions on site use, and mandate operation, maintenance, monitoring and reporting measures for all ECs and ICs. This SMP specifies the methods necessary to ensure compliance with all ECs and ICs required by the Environmental Easement for contamination that remains at the site. This plan has been prepared by the NYSDEC, and compliance with this plan is required by the grantor of the Environmental Easement 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 and Institutional Controls; (2) media monitoring; (3) operation and maintenance of the sub-slab depressurization system; and (4) performance of periodic inspections, certification of results, and submittal of Periodic Review Reports.

To address these needs, this SMP includes three plans: (1) an Engineering and Institutional Control Plan for implementation and management of EC/ICs; (2) a Monitoring Plan for implementation of Site Monitoring; (3) an Operation and Maintenance Plan for implementation of a soil vapor intrusion mitigation system.

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 by the Environmental Easement. Failure to properly implement the SMP is a violation of the environmental easement;
- Failure to comply with this SMP is also a violation of Environmental Conservation Law, 6NYCRR Part 375 for the site, and thereby subject to applicable penalties.

1.1.3 Revisions

Revisions to this plan will be approved by the NYSDEC's project manager.

1.2 SITE BACKGROUND

1.2.1 Site Location and Description

The Camarota Cleaners site is located 325-327 Park Avenue in the City of Mechanicville, New York and is identified as Section 262.61 Block 4 and Lot 1, See Figure 1, Site Location Plan. The site covers 0.11 acres and is located at the southeast corner of the intersection of Park Avenue and Second Avenue in a primarily residential area. The property is zoned residential. At the site, a single-story building without a basement is situated on a soil supported concrete slab. The building was constructed in the mid- to late-1970s and is presently being renovated. The building is surrounded by grass on all sides.

1.2.2 Site History

Dry cleaning operations were initiated shortly after construction of the building in the 1970's and ceased in 1991. In conducting a site audit for use in selling the property, the site owner discovered chlorinated volatile organic compounds, primarily tetrachloroethene (PCE), in the soil vapor in July 1991. Dry cleaning and spot removal processes are believed to have utilized PCE, which is a typical chemical used in the dry cleaning industry. In 1999, elevated concentrations of PCE were detected within a container located in the boiler room of the building. Improper handling of PCE/PCE waste or sloppy housekeeping is the likely cause of the environmental impacts.

1.3 SUMMARY OF REMEDIAL INVESTIGATIONS

This section describes the findings for all environmental media that were evaluated. As described in the Remedial Investigation (RI) report, groundwater, soil, and soil vapor intrusion samples were collected to characterize the nature and extent of contamination. The site related contaminants fall in one category: volatile organic compounds (VOCs).

Groundwater

Five groundwater sampling events were conducted quarterly to assess groundwater conditions on-site and off-site. Groundwater samples were collected from overburden and bedrock monitoring wells. Site contamination was detected in the shallow groundwater on-site at concentrations that exceeded the standards, criteria, or guidelines (SCGs) for volatile organic compounds. Site contaminants were not detected above SCGs at the two down-gradient monitoring wells, located approximately 100 feet east of the site. Contaminant levels in on-site bedrock groundwater exceeded the SCG for one volatile organic compound during one of the

five sampling events. Table 1 and Figures 2 through 5 present a summary of RI analytical data for groundwater.

Table 1 – Groundwater			
Detected Constituents	Concentration Range Detected (ppb) ^a	SCG ^b (ppb)	Frequency Exceeding SCG
VOCs			
tetrachloroethene (PCE)	ND to 130	5	19 of 45
trichloroethene (TCE)	ND to 39	5	15 of 45
cis-1,2 dichloroethene (DCE)	ND to 180	5	15 of 45
trans – 1,2 dichloroethene	ND to 7.4	5	2 of 45
vinyl chloride (VC)	ND to 62	2	11 of 45
chloroform	ND to 11	7	1 of 45

a - ppb: parts per billion, which is equivalent to micrograms per liter, ug/L, in water.

b- SCG: Standard Criteria or Guidance - Ambient Water Quality Standards and Guidance Values (TOGs 1.1.1).

c – ND is non-detect.

The primary groundwater contaminants are PCE and associated breakdown products trichloroethene (TCE), cis-1,2 dichloroethene (DCE), trans-1,2 dichloroethene, and vinyl chloride (VC), which are known as chlorinated volatile organic compounds. The detection of the breakdown products is due to microbial degradation of PCE. The chlorinated volatile organic compounds are focused towards the northern and southern ends of the site, as illustrated on Figure 5.

RI activities did evaluate the hybrid poplar trees planted in April 2007 by the property owner and their impact on groundwater conditions. The hybrid poplar trees planted at the site were sampled and found to be taking up PCE and TCE from the environment. The poplar trees have had a limited impact on groundwater conditions, but they may have a greater impact as they continue to grow and rates of groundwater uptake increase.

Soil

Three subsurface soil samples from approximately 4 feet below ground surface were collected at the eastern side of the site during the RI to fill in data gaps from previous investigations, which collected 43 subsurface soil samples at the site from depths ranging from 2 inches below ground surface to 11 feet below ground surface. No site-related soil contamination of concern was identified during the RI.

Soil Vapor Intrusion

The potential for soil vapor intrusion resulting from the presence of site related soil or groundwater contamination was evaluated by the sampling of sub-slab soil vapor under structures and indoor air inside structures. At this site due to the presence of buildings in the impacted area a full suite of samples were collected to evaluate whether soil vapor intrusion was occurring.

Soil vapor intrusion evaluations were performed at the on-site structure and six adjacent properties. Outdoor air samples were also collected as part of the soil vapor intrusion evaluation. The results indicate that site related contaminants, PCE and TCE, were detected in an on-site sub-slab soil vapor sample and at decreased concentrations in off-site sub-slab soil vapor samples. PCE was detected in the indoor air of four structures at concentrations within the range of typical indoor air background concentrations. The sub-slab depressurization system that was installed by the property owner was evaluated and found to be operating appropriately based on site conditions. Concentrations beneath the on-site structure have reduced due to operation of the sub-slab depressurization system. Table 2 presents a summary of RI analytical data for outdoor air, indoor air, and sub-slab soil vapor.

Elevated concentrations of TCE were detected in the indoor air at one structure located off-site. The pre-sampling survey identified that TCE was used in the building, which is the likely source of the detection in the indoor air since the indoor air concentration was higher than the sub-slab soil vapor concentration.

Table 2 - Outdoor Air, Indoor Air, and Sub-slab Soil Vapor			
Detected Constituents	Outdoor Air Concentration Range Detected (ug/m ³) ^a	Indoor Air Concentration Range Detected (ug/m ³) ^a	Sub-Slab Soil Vapor Concentration Range Detected (ug/m ³) ^a
Tetrachloroethene (PCE)	ND	ND to 2.3	0.9 to 120
Trichloroethene (TCE)	ND	ND to 62	ND to 3.1

a – ug/m³: micrograms per cubic meter;

b – ND is non-detect.

The results of the investigations are described in detail in the following reports:

- Preliminary Site Assessment Report, dated April 2000.
- Soil Vapor Evaluation Report, dated November 2006.

- Submittal of Technical Data and Information, dated January 11, 2008, summarizing the planting of 27 hybrid poplar trees in April 2007 and installation of a sub-slab depressurization system at the site in May 2007.
- Remedial Investigation Report, dated August 2009.

1.4 SUMMARY OF REMEDIAL ACTIONS

The following is a summary of the remedial actions presented in the ROD, dated March 2010, to be performed or has been performed:

1. The operation of the sub-slab depressurization system will continue until NYSDOH determines that it is no longer needed to mitigate soil vapor intrusion.
2. Periodic groundwater sampling for site contaminants to evaluate the anaerobic dechlorination that is naturally occurring.
3. Imposition of an institutional control in the form of an environmental easement for the controlled property that:
 - (a) requires the remedial party or site owner to complete and submit to the Department a periodic certification of institutional and engineering controls in accordance with Part 375-1.8 (h)(3).
 - (b) land use is subject to local zoning laws, the remedy allows the use and development of the controlled property for
X residential use X restricted residential use X commercial use X industrial use
 - (c) restricts the use of groundwater as a source of potable or process water, without necessary water quality treatment as determined by the Department, NYSDOH or County DOH;
 - (d) requires compliance with the Department approved Site Management Plan;
4. Since the remedy results in contamination remaining at the site that does not allow for unrestricted use, a Site Management Plan is required, which includes the following:
 - (a) an Institutional and Engineering Control Plan that identifies all use restrictions and engineering controls for the site and details the steps and media-specific requirements necessary to assure the following institutional and/or engineering controls remain in place and effective:

Institutional Controls: The Environmental Easement discussed in Paragraph 3 above.

Engineering Controls: The sub-slab depressurization system discussed in Paragraph 1 above.

This plan includes, but may not be limited to:

- (i) descriptions of the provisions of the environmental easement including groundwater use restrictions;
- (ii) provisions for the management and inspection of the identified engineering controls;
- (iii) maintaining site access controls and Department notification; and
- (iv) the steps necessary for the periodic reviews and certification of the institutional and/or engineering controls;

- (b) a Monitoring Plan to assess the performance and effectiveness of the remedy.

The plan includes, but not be limited to:

- (i) monitoring of groundwater to assess the performance and effectiveness of the remedy;
- (ii) a schedule of monitoring and frequency of submittals to the Department;

5. A site management program will be implemented to provide the details necessary for the operation, maintenance, and monitoring of the remedial program.

2.0 ENGINEERING AND INSTITUTIONAL CONTROL PLAN

2.1 INTRODUCTION

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

2.2 ENGINEERING CONTROLS

2.2.1 Engineering Control Systems

Exposure to remaining contamination in soil vapor is prevented by continued operation of the sub-slab depressurization system installed at the site. A details of the system are provided in

Appendix B. A procedure for the inspection and maintenance of the system is provided in the Operation and Maintenance Plan (Section 4 of this SMP).

2.2.2 Criteria for Completion of Remediation/Termination of Remedial/Mitigation Systems

The on-site sub-slab depressurization system will not be discontinued unless prior written approval is granted by the NYSDEC following consultation with NYSDOH.

2.3 INSTITUTIONAL CONTROLS

A series of Institutional Controls is required by the ROD to: (1) implement, maintain and monitor Engineering Control systems; and (2) prevent future exposure to contamination by restricting groundwater use. Adherence to these Institutional Controls on the site is required by the Environmental Easement and will be implemented under this Site Management Plan. Institutional Controls identified in the Environmental Easement may not be discontinued without an amendment to or extinguishment of the Environmental Easement.

The site has a series of Institutional Controls in the form of site restrictions. Adherence to these Institutional Controls is required by the Environmental Easement. Site restrictions that apply to this site are:

- The use of the groundwater underlying the property as a source of potable or process water, without necessary water quality treatment as determined by NYSDOH, is prohibited; and
- 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 individual that the NYSDEC finds acceptable.

2.4 INSPECTIONS AND NOTIFICATIONS

2.4.1 Inspections

Inspections of all remedial components installed at the site will be conducted during Periodic Reviews of the site. Inspections and reporting will be conducted in accordance with the procedures set forth in this SMP (Section 4.2 and Section 5.1).

If an emergency, such as a natural disaster or an unforeseen failure of the sub-slab depressurization system occurs, the owner shall contact the NYSDEC so an inspection of the site can be conducted to evaluate the integrity of the system.

2.4.2 Notifications

Notifications will be submitted by the property owner to the NYSDEC contact, Table 1, as needed for the following reasons:

- Notice within 5 days of any damage or defect to the foundation's structures that reduces or has the potential to reduce the effectiveness of the sub-slab depressurization system and likewise any action to be taken to mitigate the damage or defect.
- Notice within 5 days of any emergency, such as a fire, flood, or earthquake that reduces or has the potential to reduce the effectiveness of the sub-slab depressurization system, including a summary of actions taken, or to be taken.

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 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

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 the New York State Department of

Environmental Conservation project manager. The emergency contact list must be maintained in an easily accessible location at the site.

Table 1: Emergency Contact Information

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
NYSDEC Project Manager	Brian Jankauskas, P.E. (518) 402-9620 625 Broadway, 11 th Floor Albany, NY 12233-7015
Property Owner	Ms. Doreen Dyer (518) 664-3540 159 South Pearl Street Mechanicville, NY 12118

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

3.0 SITE MONITORING PLAN

3.1 INTRODUCTION

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

3.2 GROUNDWATER MONITORING PROGRAM

Groundwater monitoring will be performed annually by NYSDEC to evaluate the anaerobic dechlorination. Groundwater samples will be collected from seven existing shallow monitoring wells, identified as MW-01 through MW-07.

All monitoring activities will be recorded on the monitoring well sampling logs in Appendix C. The depth to groundwater shall be documented prior to lowering equipment into the monitoring well. Standard purge techniques shall be performed to remove three well volumes prior to collection of groundwater samples. Groundwater parameters shall be recorded prior to purging and after each well volume. Samples shall be analyzed by an ELAP certified laboratory for volatile organic compounds in accordance with EPA method 8260, reporting limits of 5 micrograms per liter. A duplicate, trip blank, and field blank samples shall be collected. A chain of custody shall be completed by the sampler and submitted with the samples to the laboratory.

After each sampling event a letter report shall be prepared that summarizes field work performed and provides laboratory data sheets and field forms. Data will be reported in electronic format.

3.3 MONITORING WELL DECOMMISSIONING

When determined appropriate, nine monitoring wells, identified as MW-01 through MW-09, will be properly decommissioned by NYSDEC in accordance with Groundwater Monitoring Well Decommissioning Policy CP-43. The monitoring well locations are illustrated on Figure 6

and construction details are provided in Appendix D. The flushmounts shall be removed to facilitate reseeding. Grouting in place is the anticipated decommission method. A standard grout mixture shall be used (94 pounds of Type I Portland cement, 3.9 pounds powdered bentonite, and 7.8 gallons potable water). CP-43 well decommissioning records shall be prepared for each monitoring well, Appendix E.

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. 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, MAINTENANCE AND MONITORING

A sub-slab depressurization system was installed in May 2007 to provide a preferential pathway for soil vapors to move from beneath the building to the outside. The system installation report is included as Appendix B, which details the construction and performance of the system after installation. This is a low maintenance system and as a result the property owner is responsible for supplying power and monitoring the system, once every three months, and contacting the NYSDEC project manager when a problem arises (i.e. fan off/noisy or manometer levels are equal). When the NYSDEC is contacted by the owner, a NYSDEC contractor will be retained to maintain the system and a Maintenance Request Form (Appendix F) will be completed. During system maintenance, and periodic reviews, the Periodic Operations Visit Form will be completed (Appendix G). Maintenance reports and any other information generated during regular operations at the site will be submitted as part of the Periodic Review Report, as specified in the Section 5 of this SMP. Sub-slab depressurization system testing may be necessary if significant changes are made to the system (i.e. replace fan or removal of an extraction point).

5.0 INSPECTIONS, REPORTING AND CERTIFICATIONS

5.1 SITE INSPECTIONS

5.1.1 Inspection Frequency

Inspections will be conducted during periodic reviews. Inspections of remedial components will also be conducted when a breakdown of any mitigation system component has occurred or whenever a severe condition has taken place.

5.1.2 Inspection Forms, Sampling Data, and Maintenance Reports

System inspection events will be recorded on the form in Appendix G. Additionally, a general site-wide inspection form will be completed during the site-wide inspection (see Appendix H).

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
- The site remedy continues to be protective of public health and the environment and is performing as desired in the ROD.

5.2 CERTIFICATION OF ENGINEERING AND INSTITUTIONAL CONTROLS

The property owner will be required to 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 institutional control and engineering control employed at this site is unchanged from the date the control was put in place, or last approved by the NYSDEC;
- 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 NYSDEC to evaluate the remedy;
- Use of the site is compliant with the environmental easement;
- Verify site details (i.e. contact information, property sub-divided or sold, permits issued, etc.).
- 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, [name], of [business address], am certifying as [Owner or Owner’s Designated Site Representative] for the site.

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

The NYSDEC will be responsible for preparing the Periodic Review Report, which evaluates the engineering controls and institutional controls:

- The inspection of the site to confirm the effectiveness of the institutional and engineering controls required by the remedial program are operational; and
- The engineering control systems are performing as designed and are effective;

5.3 PERIODIC REVIEW REPORT

A Periodic Review Report will be prepared by the NYSDEC with input from the property owner, beginning eighteen months after the environmental easement is recorded and then at intervals defined at that time, maximum 5 years. The report will be prepared in accordance with NYSDEC DER-10. The report will include:

- Identification, assessment of all ECs/ICs required by the remedy for the site;

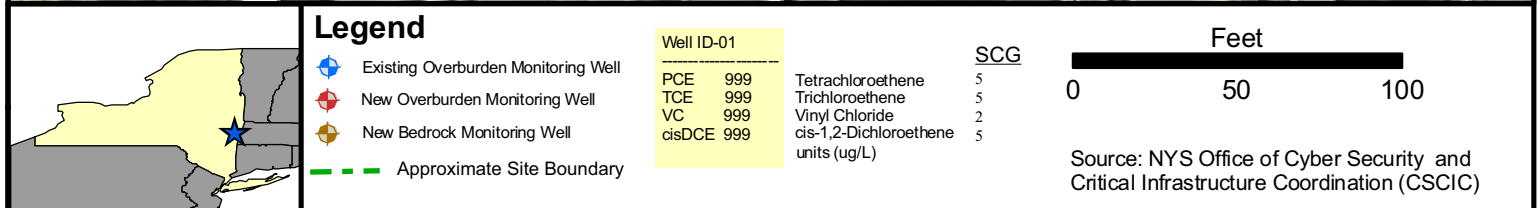
- Results of site inspections and severe condition inspections, if applicable;
- A summary of any monitoring data and/or information generated during the reporting period;
- A site evaluation, which includes the following:
 - The compliance of the remedy with the requirements of the site-specific ROD;
 - The operation and the effectiveness of the sub-slab depressurization system, 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 available at the NYSDEC Central Office.

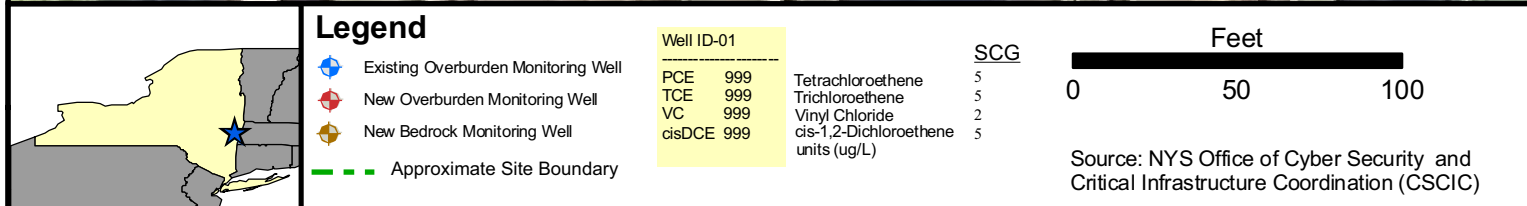
5.4 CORRECTIVE MEASURES PLAN

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 prepared. This plan will explain the failure and provide the details and schedule for performing work necessary to correct the failure.

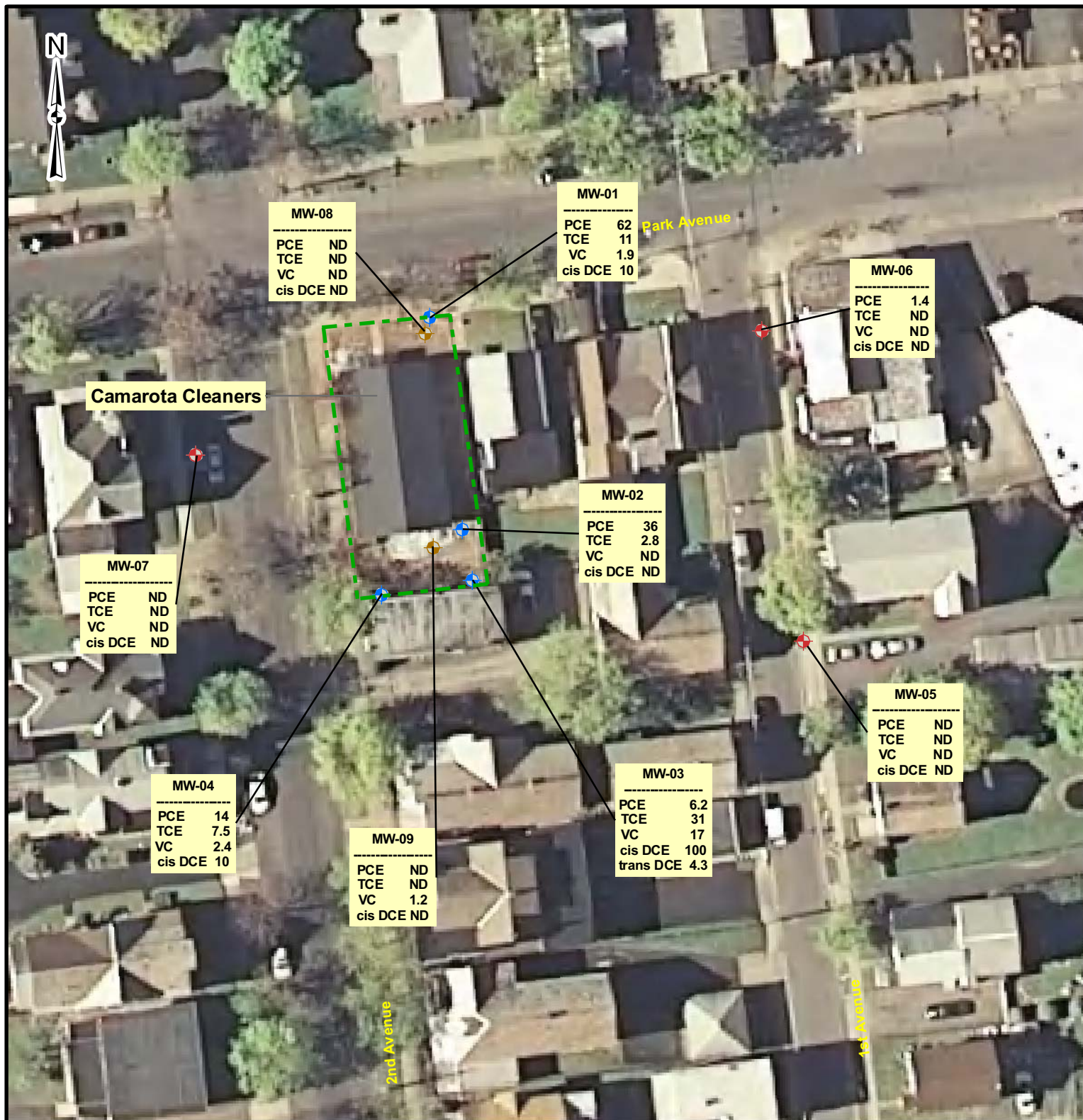
Figures



CAMAROTA CLEANERS (546044)
GROUNDWATER CONCENTRATIONS
CHLORINATED VOLATILE ORGANICS (APRIL 2008)
FIGURE 2



CAMAROTA CLEANERS (546044)
GROUNDWATER CONCENTRATIONS
CHLORINATED VOLATILE ORGANICS (SEPTEMBER 2008)
FIGURE 3



Legend

- Existing Overburden Monitoring Well
- New Overburden Monitoring Well
- New Bedrock Monitoring Well
- Approximate Site Boundary

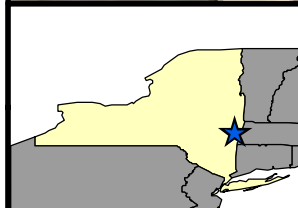
Well ID-01		SCG
PCE	999	5
TCE	999	5
VC	999	2
cisDCE	999	5

Tetrachloroethene
Trichloroethene
Vinyl Chloride
cis-1,2-Dichloroethene
units (ug/L)

Feet

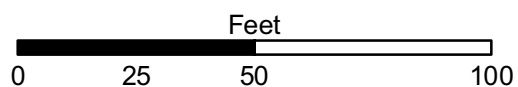
Source: NYS Office of Cyber Security and Critical Infrastructure Coordination (CSCIC)

CAMAROTA CLEANERS (546044)
 GROUNDWATER CONCENTRATIONS
 CHLORINATED VOLATILE ORGANICS (APRIL 2009)
 FIGURE 4



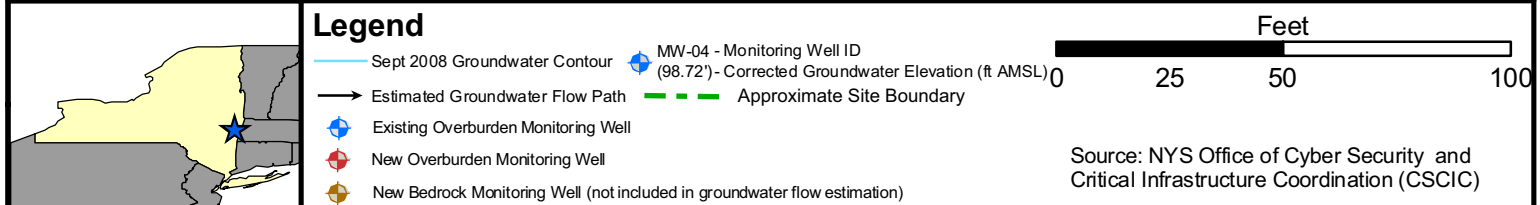
Legend

- ◆ Existing Monitoring Well
- ◆ New Overburden Monitoring Well
- ◆ New Bedrock Monitoring Well (Analytical data not used to develop isopleth)
- Total CVOC Contour**
- Data Supported
- - - Interpolated
- - - Approximate Site Boundary



Source: NYS Office of Cyber Security and Critical Infrastructure Coordination (CSCIC)

CAMAROTA CLEANERS (546044)
GROUNDWATER CONCENTRATIONS
TOTAL CHLORINATED VOLATILE ORGANICS (APRIL 2009)
FIGURE 5



CAMAROTA CLEANERS (546044)
GROUNDWATER FLOW CONTOURS (SEPTEMBER 25, 2008)
FIGURE 6

Appendix A

**ENVIRONMENTAL EASEMENT GRANTED PURSUANT TO ARTICLE 71, TITLE 36
OF THE NEW YORK STATE ENVIRONMENTAL CONSERVATION LAW**

THIS INDENTURE made this 2nd day of June, 2011, between Owner(s) Royal R. Dyer Construction Co., Inc., having an office at 159 South Pearl Street, City of Mechanicville, County of Saratoga, State of New York (the "Grantor"), and The People of the State of New York (the "Grantee"), acting through their Commissioner of the Department of Environmental Conservation (the "Commissioner", or "NYSDEC" or "Department" as the context requires) with its headquarters located at 625 Broadway, Albany, New York 12233,

WHEREAS, the Legislature of the State of New York has declared that it is in the public interest to encourage the remediation of abandoned and likely contaminated properties ("sites") that threaten the health and vitality of the communities they burden while at the same time ensuring the protection of public health and the environment; and

WHEREAS, the Legislature of the State of New York has declared that it is in the public interest to establish within the Department a statutory environmental remediation program that includes the use of Environmental Easements as an enforceable means of ensuring the performance of operation, maintenance, and/or monitoring requirements and the restriction of future uses of the land, when an environmental remediation project leaves residual contamination at levels that have been determined to be safe for a specific use, but not all uses, or which includes engineered structures that must be maintained or protected against damage to perform properly and be effective, or which requires groundwater use or soil management restrictions; and

WHEREAS, the Legislature of the State of New York has declared that Environmental Easement shall mean an interest in real property, created under and subject to the provisions of Article 71, Title 36 of the New York State Environmental Conservation Law ("ECL") which contains a use restriction and/or a prohibition on the use of land in a manner inconsistent with engineering controls which are intended to ensure the long term effectiveness of a site remedial program or eliminate potential exposure pathways to hazardous waste or petroleum; and

WHEREAS, Grantor is the owner of real property located at the address of 325-327 Park Avenue in the City of Mechanicville, County of Saratoga and State of New York, known and designated on the tax map of the County Clerk of Saratoga as tax map parcel number: Section 262.61 Block 4 Lot 1, being the same as that property conveyed to Grantor by deed dated October 20, 2000 and recorded in the Office of the Saratoga County Clerk in Book 1564 Page 285 (the "Site"). The property subject to this Environmental Easement (the "Controlled Property") comprises approximately 0.115 ± acres, and is hereinafter more fully described in the Land Title Survey dated March 15, 2001 (the "Survey") prepared by Frederick J. Metzger, which will be attached to the Site Management Plan. The Controlled Property is shown in the Survey and attached hereto as Schedule A; and

WHEREAS, the Site Management Plan ("SMP") was issued by the Department in June of 2010 and sets forth obligations to be assumed by the Department and by Grantor and subsequent Site owners; and

WHEREAS, the Department accepts this Environmental Easement in order to ensure the protection of public health and the environment and to achieve the requirements for remediation established for the Controlled Property until such time as this Environmental Easement is extinguished pursuant to ECL Article 71, Title 36; and

NOW THEREFORE, in consideration of the mutual covenants contained herein and the terms and conditions of Order on Consent, Index Number: A5-0650-10-10 (the "Order"), Grantor conveys to Grantee a permanent Environmental Easement pursuant to ECL Article 71, Title 36 in, on, over, under, and upon the Controlled Property as more fully described herein ("Environmental Easement"). The Order sets forth and allocates responsibilities to the Grantor and the Department regarding implementing each activity set forth in the SMP.

1. Purposes. Grantor and Grantee acknowledge that the Purposes of this Environmental Easement are: to convey to Grantee real property rights and interests that will run with the land in perpetuity in order to provide an effective and enforceable means of encouraging the reuse and redevelopment of this Controlled Property at a level that has been determined to be safe for a specific use while ensuring the performance of operation, maintenance, and/or monitoring requirements; and to ensure the restriction of future uses of the land that are inconsistent with the above-stated purpose.

2. Institutional and Engineering Controls. The controls and requirements listed in the Department approved Site Management Plan ("SMP"), including any and all Department approved amendments to the SMP that are allocated to Grantor in the Order (*see* Exhibit C to the Order), are incorporated into and made part of this Environmental Easement. These controls and requirements apply to the use of the Controlled Property, run with the land, are binding on the Grantor and the Grantor's successors and assigns, and are enforceable in law or equity against any owner of the Controlled Property, any lessees and any person using the Controlled Property.

A. (1) The Controlled Property may be used for:

Residential use, restricted residential use, commercial use and industrial use

(2) All Engineering Controls must be operated and maintained as specified in the Site Management Plan (SMP);

- (i) Grantor and subsequent Site owners shall ensure that the Environmental Easement remains in place and effect;
- (ii) The Department shall maintain the sub-slab depressurization system; and
- (iii) Grantor and subsequent Site owners shall supply electrical power to the sub-slab depressurization system.

(3) All Engineering Controls must be inspected at a frequency and in a manner defined in the SMP.

- (i) Grantor and subsequent Site owners shall visually monitor the sub-

slab depressurization system once every three months.

(4) Groundwater and other environmental or public health monitoring must be performed as defined in the SMP.

- (i) The Department shall undertake periodic groundwater sampling; and
- (ii) Grantor shall adhere to the institutional controls required by the Environmental Easement, including prohibition of the use of groundwater underlying the Site as a source of potable or process water without necessary water quality treatment.

(5) Data and information pertinent to Site Management of the Controlled Property must be reported at the frequency and in a manner defined in the SMP;

- (i) Grantor and subsequent Site owners shall report emergencies to the Department and other appropriate authorities.

(6) All future activities on the property that will disturb remaining contaminated material must be conducted in accordance with the SMP;

- (i) Grantor and subsequent Site owners shall notify the Department of changes of Site use and/or ownership.

(7) Monitoring to assess the performance and effectiveness of the remedy must be performed as defined in the SMP.

- (ii) The Department shall prepare periodic review reports evaluating institutional and engineering controls; and
- (iii) The Department shall prepare and implement a corrective measures plan, if necessary.

(8) Operation, maintenance, monitoring, inspection, and reporting of any mechanical or physical components of the remedy shall be performed as defined in the SMP.

- (i) The Department shall decommission Site monitoring wells at an appropriate time to be determined by the Department.

(9) Access to the site must be provided to agents, employees or other representatives of the State of New York with reasonable prior notice to the property owner to assure compliance with the restrictions identified by this Environmental Easement.

B. The Controlled Property shall not be used for a source of potable or process water without necessary water quality treatment and the above-stated engineering controls may not be discontinued without an amendment or extinguishment of this Environmental Easement.

C. The SMP describes obligations that the Grantor assumes on behalf of Grantor, its successors and assigns. The Grantor's assumption of the obligations contained in the SMP which may include sampling, monitoring, and/or operating a treatment system, and providing certified reports to the NYSDEC, is and remains a fundamental element of the Department's determination that the Controlled Property is safe for a specific use, but not all uses. The SMP may be modified in accordance with the Department's statutory and regulatory authority. The Grantor and all successors and assigns, assume the burden of complying with the SMP and obtaining an up-to-date version of the SMP from:

Site Control Section
Division of Environmental Remediation
NYSDEC
625 Broadway
Albany, New York 12233
Phone: (518) 402-9553

D. Grantor must provide all persons who acquire any interest in the Controlled Property a true and complete copy of the SMP that the Department approves for the Controlled Property and all Department-approved amendments to that SMP.

E. Grantor covenants and agrees that until such time as the Environmental Easement is extinguished in accordance with the requirements of ECL Article 71, Title 36 of the ECL, the property deed and all subsequent instruments of conveyance relating to the Controlled Property shall state in at least fifteen-point bold-faced type:

This property is subject to an Environmental Easement held by the New York State Department of Environmental Conservation pursuant to Title 36 of Article 71 of the Environmental Conservation Law.

F. Grantor covenants and agrees that this Environmental Easement shall be incorporated in full or by reference in any leases, licenses, or other instruments granting a right to use the Controlled Property.

G. Grantor covenants and agrees that it shall annually, or such time as NYSDEC may allow, submit to NYSDEC a written statement by an expert the NYSDEC may find acceptable certifying under penalty of perjury, in such form and manner as the Department may require, that:

(1) the inspection of the site required of the Grantor in the Order to confirm the effectiveness of the institutional and engineering controls required by the remedial program was performed under the direction of the individual set forth at 6 NYCRR Part 375-1.8(h)(3).

(2) the institutional controls and/or engineering controls employed at such site:

(i) are in-place;

(ii) are unchanged from the previous certification, or that any identified changes to the controls employed were approved by the NYSDEC and that all controls are in the Department-approved format; and

(iii) that nothing has occurred that would impair the ability of such control to protect the public health and environment;

(3) the owner will continue to allow access to such real property to evaluate the continued maintenance of such controls;

(4) nothing has occurred that would constitute a violation or failure to comply with any site management plan for such controls;

(5) the report and all attachments were prepared under the direction of, and reviewed by, the party making the certification;

(6) to the best of his/her 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

(7) except as otherwise noted, the information presented is accurate and complete.

3. Right to Enter and Inspect. Grantee, its agents, employees, or other representatives of the State may enter and inspect the Controlled Property in a reasonable manner and at reasonable times to assure compliance with the above-stated restrictions.

4. Reserved Grantor's Rights. Grantor reserves for itself, its assigns, representatives, and successors in interest with respect to the Property, all rights as fee owner of the Property, including:

A. Use of the Controlled Property for all purposes not inconsistent with, or limited by the terms of this Environmental Easement;

B. The right to give, sell, assign, or otherwise transfer part or all of the underlying fee interest to the Controlled Property, subject and subordinate to this Environmental Easement;

5. Enforcement

A. This Environmental Easement is enforceable in law or equity in perpetuity by Grantor, Grantee, or any affected local government, as defined in ECL Section 71-3603, against the owner of the Property, any lessees, and any person using the land. Enforcement shall not be defeated because of any subsequent adverse possession, laches, estoppel, or waiver. It is not a defense in any action to enforce this Environmental Easement that: it is not appurtenant to an interest in real property; it is not of a character that has been recognized traditionally at common law; it imposes a negative burden; it imposes affirmative obligations upon the owner of any interest in the burdened property; the benefit does not touch or concern real property; there is no privity of estate or of contract; or it imposes an unreasonable restraint on alienation.

B. If Grantor (or its successor and assigns) violates this Environmental Easement, the Grantee may revoke the Certificate of Completion with respect to the Controlled Property.

C. Grantee shall notify Grantor of a breach or suspected breach of any of the terms of this Environmental Easement. Such notice shall set forth how Grantor can cure such breach or suspected breach and give Grantor a reasonable amount of time from the date of receipt of notice in which to cure. At the expiration of such period of time to cure, or any extensions granted by Grantee, the Grantee shall notify Grantor of any failure to adequately cure the breach or suspected breach, and Grantee may take any other appropriate action reasonably necessary to remedy any breach of this Environmental Easement, including the commencement of any proceedings in accordance with applicable law.

D. The failure of Grantee to enforce any of the terms contained herein shall not be deemed a waiver of any such term nor bar any enforcement rights.

6. Notice. Whenever notice to the Grantee (other than the annual certification) or approval from the Grantee is required, the Party providing such notice or seeking such approval shall identify the Controlled Property by referencing the following information:

Saratoga County, Site No: 546044, Order on Consent, Camarota Cleaners, Index No. A5-0650-10-10, Book 1564, Page 285

Parties shall address correspondence to: Site Number: 546044
Office of General Counsel
NYSDEC
625 Broadway
Albany New York 12233-5500

With a copy to: Site Control Section
Division of Environmental Remediation
NYSDEC
625 Broadway
Albany, NY 12233

All notices and correspondence shall be delivered by hand, by registered mail or by Certified mail and return receipt requested. The Parties may provide for other means of receiving and communicating notices and responses to requests for approval.

7. Recordation. Grantor shall record this instrument, within thirty (30) days of execution of this instrument by the Commissioner or her/his authorized representative in the office of the recording officer for the county or counties where the Property is situated in the manner prescribed by Article 9 of the Real Property Law.

8. Amendment. Any amendment to this Environmental Easement may only be executed by the Commissioner of the New York State Department of Environmental Conservation or the Commissioner's Designee, and filed with the office of the recording officer for the county or counties where the Property is situated in the manner prescribed by Article 9 of the Real Property Law.

9. Extinguishment. This Environmental Easement may be extinguished only by a release by the Commissioner of the New York State Department of Environmental Conservation, or the Commissioner's Designee, and filed with the office of the recording officer for the county or counties where the Property is situated in the manner prescribed by Article 9 of the Real Property Law.

10. Joint Obligation. If there are two or more parties identified as Grantor herein, the obligations imposed by this instrument upon them shall be joint and several.

County: Saratoga

Site No: 546044

Camarota Cleaners, Index No. A5-0650-10-10

IN WITNESS WHEREOF, Grantor has caused this instrument to be signed in its name.

Royal R. Dyer Construction Co., Inc.:

By:

Print Name:

Title:

Date:

Grantor's Acknowledgment

STATE OF NEW YORK)

) ss:

COUNTY OF)

On the 12 day of April, in the year 2011, before me, the undersigned, personally appeared Dorine F. Dyer, personally known to me or proved to me on the basis of satisfactory evidence to be the individual(s) whose name is (are) subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their capacity(ies), and that by his/her/their signature(s) on the instrument, the individual(s), or the person upon behalf of which the individual(s) acted, executed the instrument.

Notary Public - State of New York

JOYEL F. CAREY

Notary Public, State of New York

and in Rensselaer County

My Commission Expires Jan. 2, 15

JOYEL F. CAREY

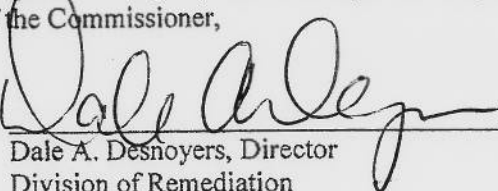
Notary Public, State of New York

Qualified in Rensselaer County

My Commission Expires Jan. 2, 15

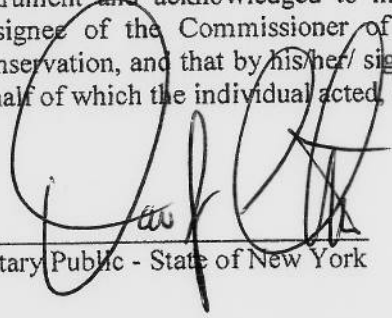
THIS ENVIRONMENTAL EASEMENT IS HEREBY ACCEPTED BY THE
PEOPLE OF THE STATE OF NEW YORK, Acting By and Through the Department of
Environmental Conservation as Designee of the Commissioner,

By:

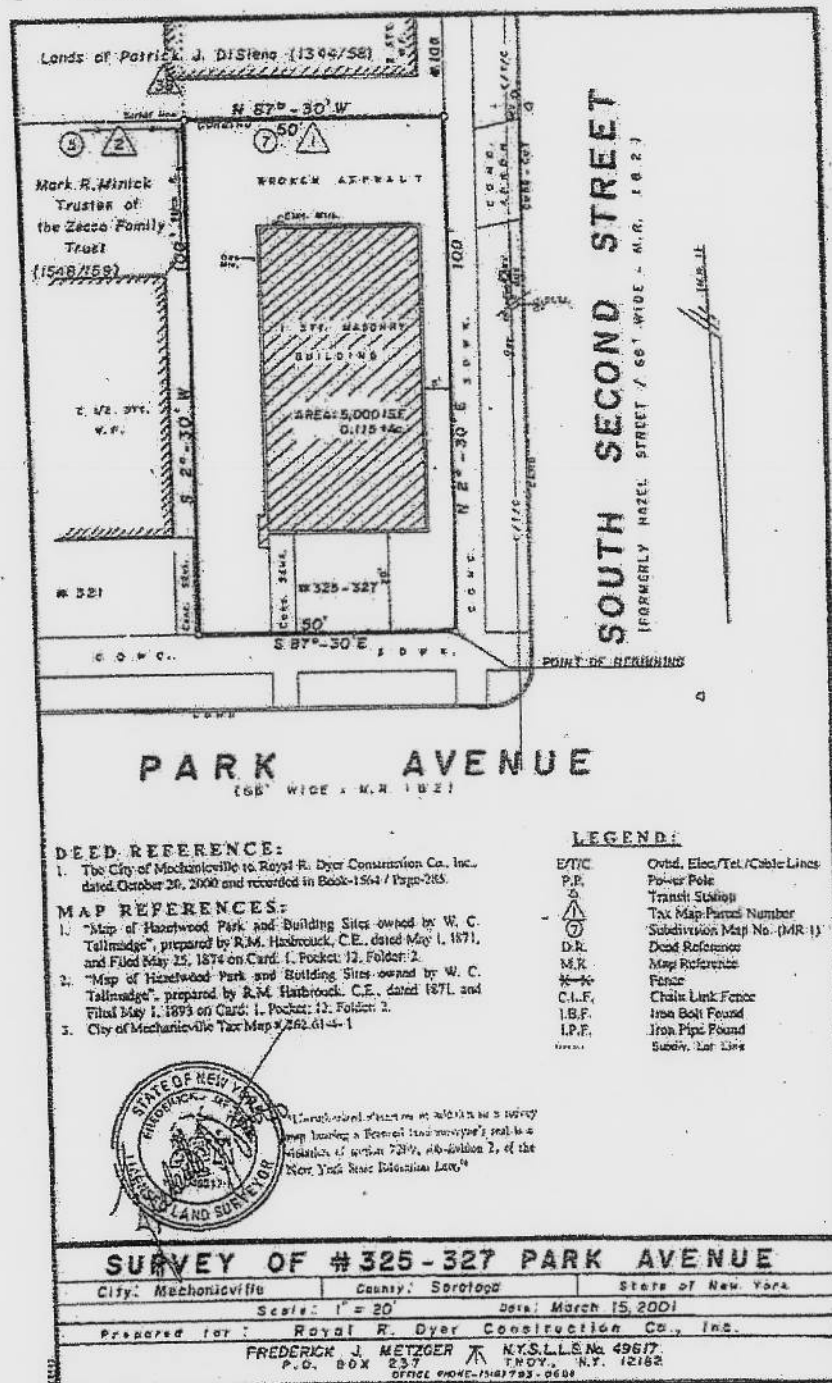

Dale A. Desnoyers, Director
Division of Remediation**Grantee's Acknowledgment**

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

On the 2nd day of June, in the year 2011, before me, the undersigned,
personally appeared Dale Desnoyers, personally known to me or proved to me on the basis of
satisfactory evidence to be the individual(s) whose name is (are) subscribed to the within
instrument and acknowledged to me that he/she/ executed the same in his/her/ capacity as
Designee of the Commissioner of the State of New York Department of Environmental
Conservation, and that by his/her/ signature on the instrument, the individual, or the person upon
behalf of which the individual acted, executed the instrument.


Notary Public - State of New York

David J. Chiusano
Notary Public, State of New York
No. 01CH5032146
Qualified in Schenectady County
Commission Expires August 22, 2014

SCHEDULE "A" PROPERTY DESCRIPTION

ALL THAT CERTAIN TRACT, PIECE, LOT OR PARCEL OF LAND, together with improvements thereon, if any, being situate in the City of Mechanicville, County of Saratoga, State of New York, as described on the Official City Tax Map of the City for the year 1995, Section Block and Lot Number as follows: 262.61-4-1.

The above premises are also described as follows:

ALL THAT TRACT OR PARCEL OF LAND, situate in the City of Mechanicville, County of Saratoga and State of New York, bounded and described as follows, to wit:

BEGINNING at a point (an iron bolt) at the southeast corner of Park Avenue and Second Street (formerly Hazel Street) and RUNNING THENCE easterly along the southerly line or side of Park Avenue, 50.00 feet; THENCE southerly at right angles with said Park Avenue and parallel with Second Street (formerly Hazel Street) 100.00 feet; THENCE westerly and parallel with said Park Avenue 50.00 feet to the easterly side or line of Second Street (formerly Hazel Street); THENCE northerly and along the easterly side or line of Second Street (formerly Hazel Street) 100.00 feet to the place of BEGINNING; said plot being the northerly part of lot known as No.7 Park Avenue, as designated on a map of the lands of William C. Tallmadge, made by R.M. Hasbrook, C.E., dated May 1, 1871, and filed in the Office of the Clerk of the County of Saratoga on the 25th day of May, 1874.

Appendix B



**Alpine
Environmental
Services, Inc.**

Sub-Slab Venting System Installation Report
327 Park Avenue, Mechanicville, New York

May 2007

By:

Alpine Environmental Services, Inc.
1146 Central Avenue
Albany, New York 12205
Phone (518) 453-0146
Fax (518) 453-0175



Alpine Environmental Services, Inc.

June 14, 2007

Dorine F. Dyer
Royal R. Dyer Construction Co., Inc.
159 Pearl Street
Mechanicville, NY 12118

Re: Sub-slab Depressurization System Installation at
327 Park Avenue, Mechanicville, New York

Alpine Environmental Services, Inc. has completed the installation of the Sub Slab Depressurization at 327 Park Avenue, Mechanicville, New York as detailed in the proposal dated April 6, 2007.

Sub Slab Depressurization System

The installed sub slab depressurization system is comprised of 4 inch PVC piping, connecting eight sub slab suction points, exiting the rear of the structure to a fan connection and discharging to the outside air.

The horizontal piping runs along the roof supports, with vertical pipes extending to the floor along outside walls. See attached drawing for "as-built" condition.

The system fan was mounted in the rear of the structure approximately 16 feet above grade. The exhaust pipe exits the fan and continues to a termination point. The exhaust is fitted with a cap to prevent the entry of rodents or birds.

All trunk lines and suction risers were constructed of Schedule 20 PVC piping and schedule 20 PVC pipe fittings, with the exception of the exterior piping which was schedule 40. All connections were cemented, with the exception of the fan connections, which were secured with flexible PVC, screw tightened couplings. Suction points were sealed into the concrete floor slab with a floor flange, sealed air tight, with polyurethane caulk.

- 3-inch ball valves and 4-inch metal duct dampers were installed as needed for system balancing and control of the pressure field.
- Exhaust pipes were installed on the east side of the structure, a minimum of 10 feet above grade, away from any intakes or openings.



**Alpine
Environmental
Services, Inc.**

- The system was fitted with a manometer (pressure meter). This device maintains a real-time pressure reading on the system. Periodic monitoring of the system pressure has been incorporated into the building maintenance. Any significant change in the pressure will be cause for service on the system.

Post installation testing and balancing was performed following the installation. The system was balanced utilizing ball valves and dampers to control the Pressure Field Extension (PFE). PFE was verified by drilling numerous, 3/8" test holes, distributed throughout the floor slab. A micro manometer was used to verify negative pressure extension and adjust valves for a complete PFE distribution. Test holes were sealed with polyurethane caulk following completion of test data collection. Test locations and results are documented on the attached drawing.


Conclusion

The sub slab depressurization system has been installed according to the EPA Guidance Documents. Post installation pressure test results indicate adequate pressure field extension and systems operating within the manufacturers required pressure ranges and air flow limits. The system has been fitted with permanent pressure monitoring equipment to identify system failure. An operations and maintenance checklist has been included.

If you require any further information or discussion, feel free to contact me (518) 453-0146 ext. 303.

Sincerely,

ALPINE ENVIRONMENTAL SERVICES, INC.


Mark Schnitzer, P.E.
Environmental Engineer

email: MarkS@Alpineenv.com
ph (518) 453-0146
fax (518) 453-0175

Included:

Drawing of Installed System Layout, pressure test locations
RadonAway GP-501 Fan Installation Instructions
SSD System Operations and Maintenance Procedures and Checklist



**Operations and Maintenance
Sub-Slab Venting System
327 Park Avenue, Mechanicville, New York**

SYSTEM MAINTENANCE

The sub-slab venting system is designed to be maintenance free, for the life of the fan. All moving parts of the system are sealed in the fan-housing unit. The fan-housing unit should only be opened by the fan manufacturer. Any attempt to open the fan-housing unit will destroy the factory installed seals and void any warranty, parts and labor, on the entire venting system.

**ANNUAL SYSTEM INSPECTION
(INSPECT EACH TRUNK LINE INDEPENDENTLY)**

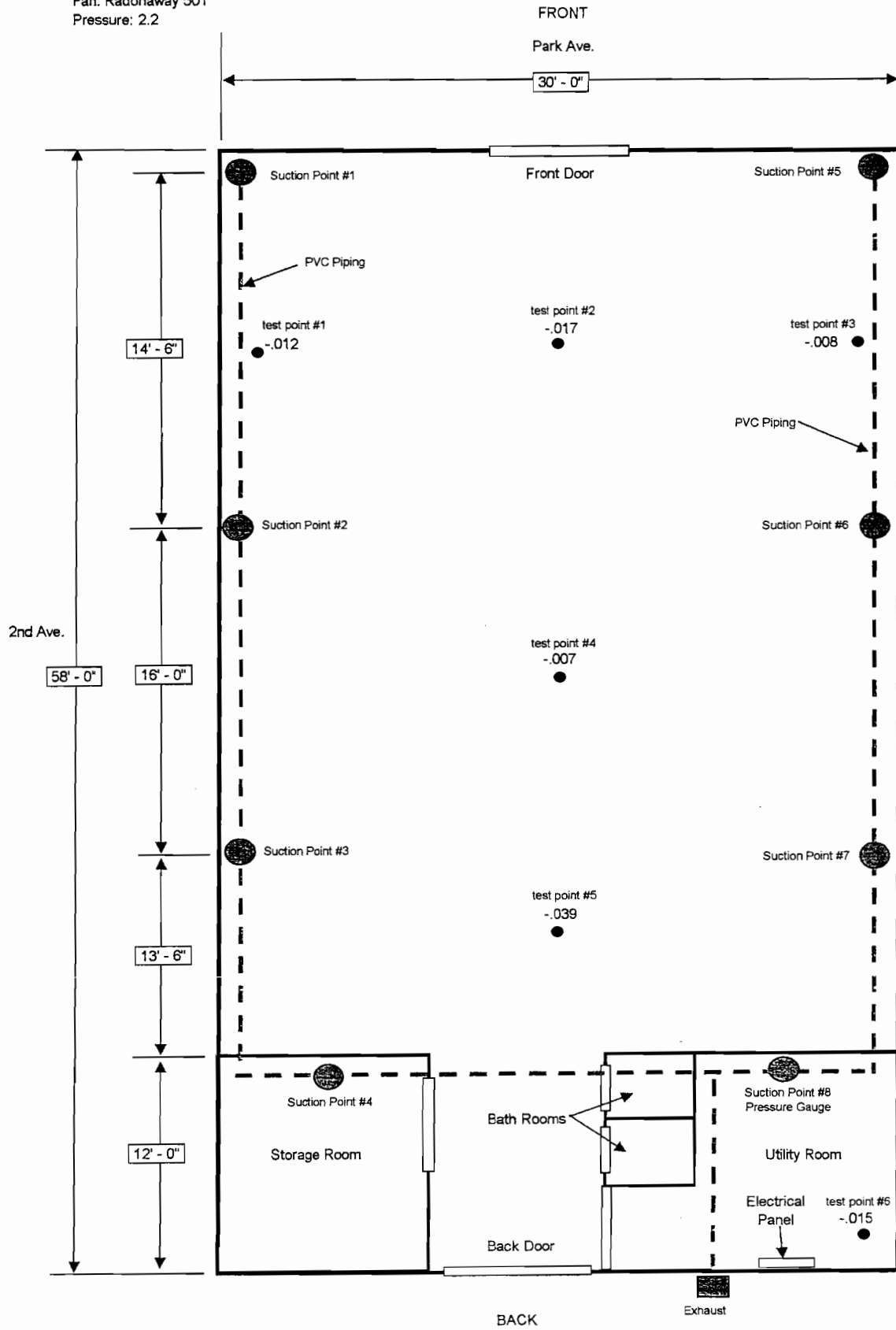
- Inspect the exposed system piping for any breach or damage.
- Inspect the caulk seal at each of the suction points (a breach in the seal should produce an air leak noise). If breach is observed, caulk with polyurethane caulk.
- Observe the static system pressure in each system on the manometer. Record the system pressure in the chart provided. Compare the static system pressure to the acceptable static pressure range. If static pressure is outside the acceptable range, call for service.
-

	2007 Initial Pressure Reading (Inches Water) Acceptable Range (+/- 25% Initial Read)	2008 Pressure Reading (Inches Water)	2009 Pressure Reading (Inches Water)	2010 Pressure Reading (Inches Water)	2011 Pressure Reading (Inches Water)	2012 Pressure Reading (Inches Water)
SSD SYSTEM	2.2"					
	1.65" to 2.75"					

	2007 Initial Pressure Reading (Inches Water) Acceptable Range (+/- 25% Initial Read)	20013 Pressure Reading (Inches Water)	2014 Pressure Reading (Inches Water)	2015 Pressure Reading (Inches Water)	2016 Pressure Reading (Inches Water)	2017 Pressure Reading (Inches Water)
SSD SYSTEM	2.2"					
	1.65" to 2.75"					

Royal Dyer Construction
327 Park Ave.
Mechanicville, NY

Chlorinated Solvent
Fan: Radonaway 501
Pressure: 2.2





RadonAway Ward Hill, MA IN014 Rev E

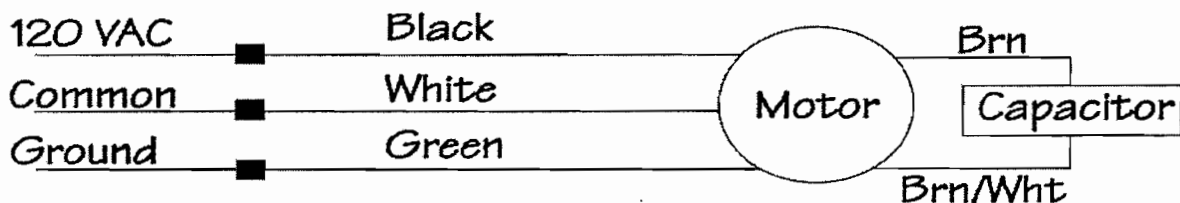
XP/GP/XR Series Fan Installation Instructions

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 combustibles 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 in accordance with local and national electrical codes.

DynaVac GP/XP/XR/RP Series Fan Wiring Diagram





INSTALLATION INSTRUCTION IN014 Rev E

DynaVac - XP/XR Series

XP101 p/n 23008-1,-2

XP151 p/n 23010-1,-2

XP201 p/n 23011-1,-2

XR161 p/n 23018-1,-2

XR261 p/n 23019-1,-2

DynaVac - GP Series

GP201 p/n 23007-1

GP301 p/n 23006-1,-2

GP401 p/n 23009-1

GP501 p/n 23005-1,-2

1.0 SYSTEM DESIGN CONSIDERATIONS

1.1 INTRODUCTION

The DynaVac GP/XP/XR 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 GP/XP/XR 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 GP/XP/XR 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 GP/XP/XR 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 GP/XP/XR 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 GP/XP/XR Series Fan best suited for the sub-slab material can improve the slab coverage. The GP & XP series have a wide range of models to choose from to cover a wide range of subslab material. The higher static suction fans are generally used for tighter subslab materials. The XR Series is specifically designed for high flow applications such as stone/gravel and drain tile. 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 GP/XP/XR 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 GP/XP/XR Series Fans are **NOT** suitable for underground burial.

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

Pipe Dia.	Minimum Rise per Foot of Run*		
	@25 CFM	@50 CFM	@100 CFM
4"	1/8"	1/4"	3/8"
3"	1/4"	3/8"	1 1/2"



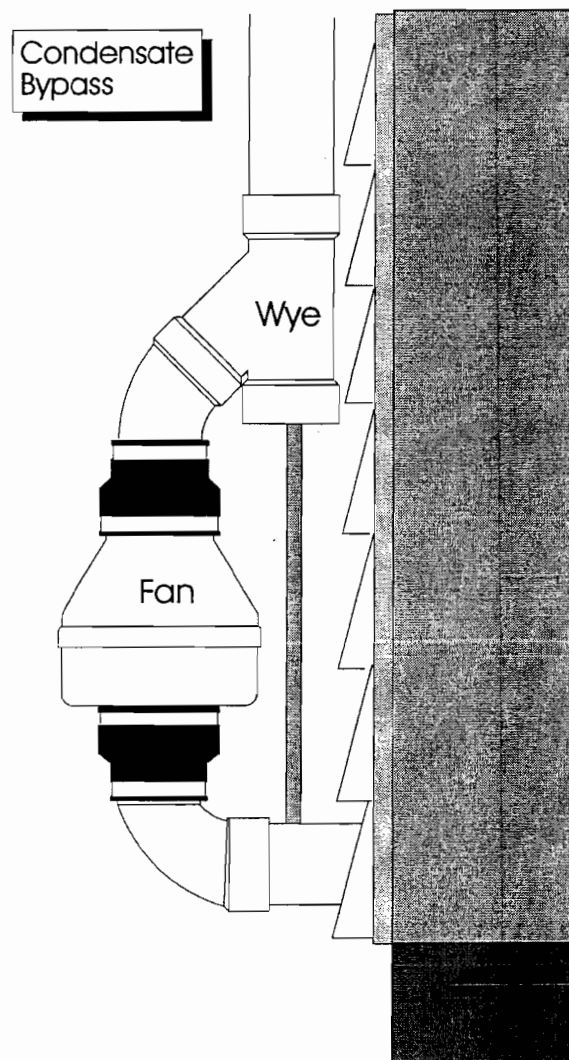
*Typical GP/XP/XR Series Fan operational flow rate is 25 - 90 CFM.
(For more precision, determine flow rate by using the chart in the addendum.)

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

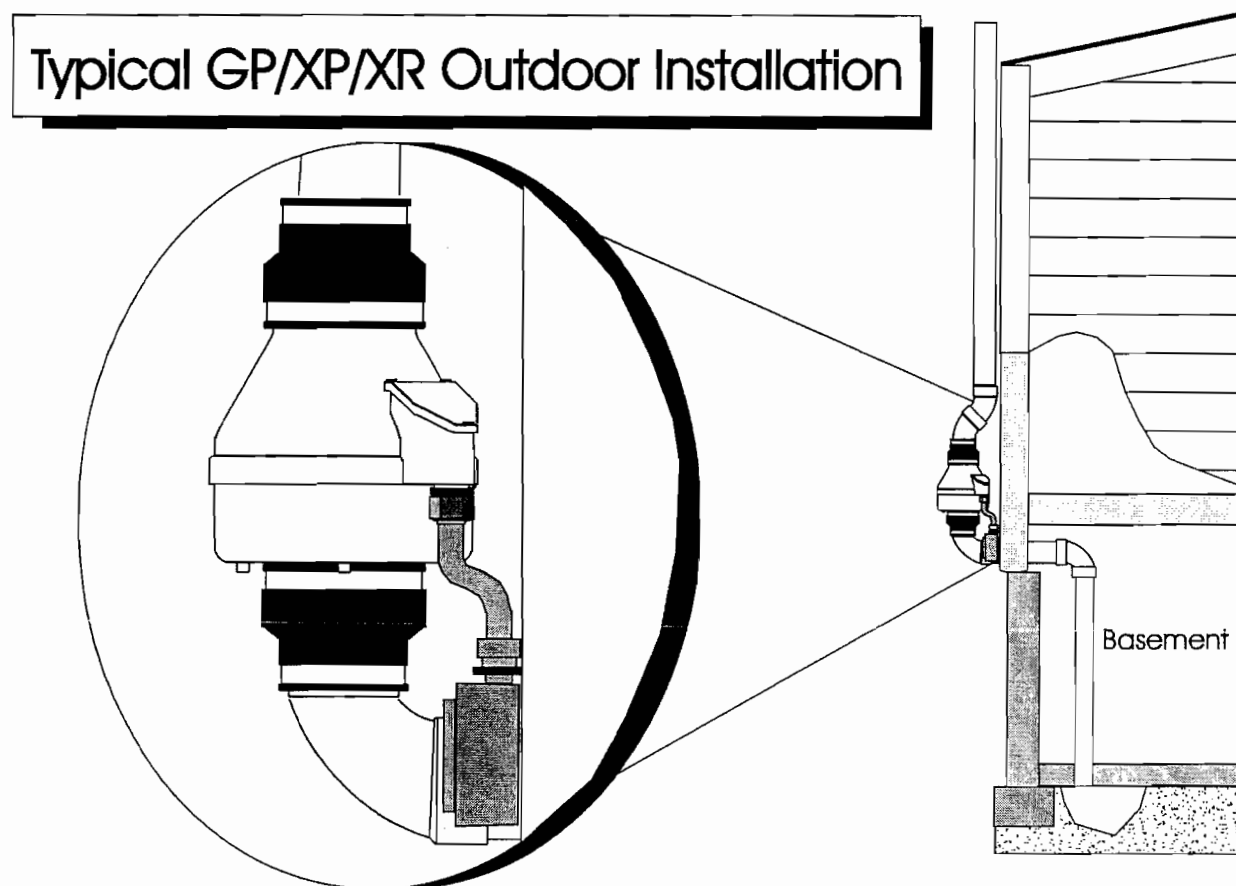
The GP/XP/XR Series Fans operate on standard 120V 60 Hz. AC. All wiring must be performed in accordance with the National Electrical Code and state and local building codes. All electrical work should be performed by a qualified electrician. Outdoor installations require the use of a U.L. listed watertight conduit.

1.9 SPEED CONTROLS

The GP/XP/XR Series Fans are rated for use with electronic speed controls ,however, they are generally not recommended.

2.0 INSTALLATION

The GP/XP/XR Series Fan can be mounted indoors or outdoors. (It is suggested that EPA recommendations be followed in choosing the fan location.) The GP/XP/XR 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 GP/XP/XR 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 GP/XP/XR Series fan may be optionally secured with the integral mounting bracket on the GP Series fan or with RadonAway P/N 25007-2 mounting bracket for an XP/XR Series fan. Foam or rubber grommets may also be used between the bracket and mounting surface for vibration isolation.

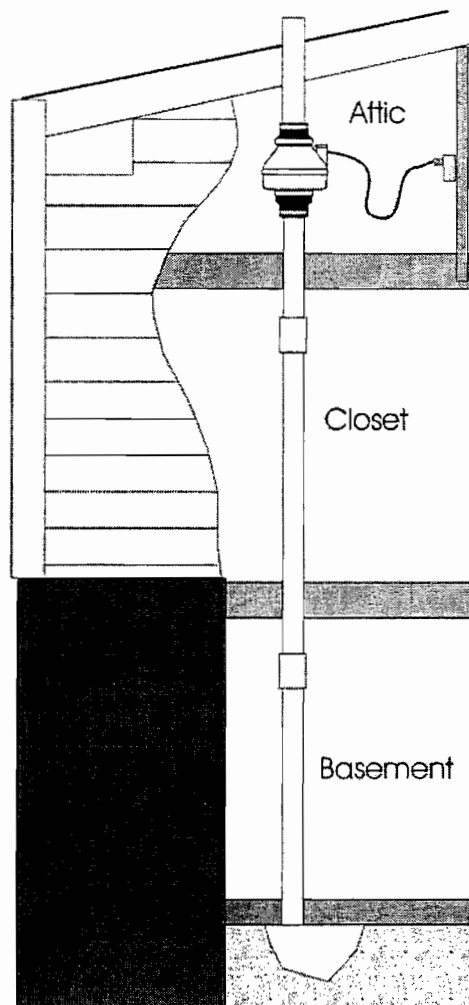
2.3 SYSTEM PIPING

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 GP/XP/XR 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.

XP/XR SERIES PRODUCT SPECIFICATIONS

The following chart shows fan performance for the XP & XR Series Fan:

	Typical CFM Vs Static Suction "WC								
	0"	.25"	.5"	.75"	1.0"	1.25"	1.5"	1.75"	2.0"
XP101	125	118	90	56	5	-	-	-	-
XP151	180	162	140	117	78	46	10	-	-
XP201	150	130	110	93	74	57	38	20	-
XR161	215	175	145	105	75	45	15	-	-
XR261	250	215	185	150	115	80	50	20	-

Maximum Recommended Operating Pressure*	
XP101	0.9" W.C. (Sea Level Operation)**
XP151	1.3" W.C. (Sea Level Operation)**
XP201	1.7" W.C. (Sea Level Operation)**
XR161	1.3" W.C. (Sea Level Operation)**
XR261	1.6" W.C. (Sea Level Operation)**

*Reduce by 10% for High Temperature Operation

**Reduce by 4% per 1000 feet of altitude

Power Consumption @ 120 VAC	
XP101	40 - 49 watts
XP151	45 - 60 watts
XP201	45 - 66 watts
XR161	48 - 75 watts
XR261	65 - 105 watts

XP Series Inlet/Outlet: 4.5" OD (4.0" PVC Sched 40 size compatible)

XR Series Inlet/Outlet: 5.875" OD

Mounting: Mount on the duct pipe or with optional mounting bracket.

Recommended ducting: 3" or 4" Schedule 20/40 PVC Pipe

Storage temperature range: 32 - 100 degrees F.

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

Maximum inlet air temperature: 80 degrees F.

Size: 9.5H" x 8.5" Dia.

Weight: 6 lbs. (XR261 - 7 lbs)

Continuous Duty

Thermally protected

Class B Insulation

3000 RPM

Residential Use Only

Rated for Indoor or Outdoor use

LISTED
Electric Fan



Tested to
UL
Std. 507

77728

GP SERIES PRODUCT SPECIFICATIONS

The following chart shows fan performance for the GPx01 Series Fan:

	Typical CFM Vs Static Suction "WC						
	1.0"	1.5"	2.0"	2.5"	3.0"	3.5"	4.0"
GP501	95	87	80	70	57	30	5
GP401	93	82	60	38	12	-	-
GP301	92	77	45	10	-	-	-
GP201	82	58	5	-	-	-	-

Maximum Recommended Operating Pressure*		
GP501	3.8" W.C.	(Sea Level Operation)**
GP401	3.0" W.C.	(Sea Level Operation)**
GP301	2.4" W.C.	(Sea Level Operation)**
GP201	1.8" W.C.	(Sea Level Operation)**

*Reduce by 10% for High Temperature Operation

**Reduce by 4% per 1000 feet of altitude

Power Consumption @ 120 VAC	
GP501	70 - 140 watts
GP401	60 - 110 watts
GP301	55 - 90 watts
GP201	40 - 60 watts

Inlet/Outlet: 3.5" OD (3.0" PVC Sched 40 size compatible)

Mounting: Fan may be mounted on the duct pipe or with integral flanges.

Weight: 12 lbs.

Size: 13H" x 12.5" x 12.5"

Recommended ducting: 3" or 4" Schedule 20/40 PVC Pipe

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

3000 RPM

Thermally protected

Rated for Indoor or Outdoor Use

GP301C / GP501C Rated for Commercial Use



IMPORTANT INSTRUCTIONS TO INSTALLER

Inspect the GPx01/XP/XR 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 GPx01/XP/XR 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 _____

Appendix C

Standard Monitoring Well Sampling Log

Well No.:

Project: Camarota Cleaners

Date:

Location: 325 Park Avenue
Mechanicville, NY

Project No.: 546044

Well Depth:

Well Diameter:

Measuring Point:

Water Level:

Sample Time:

Sample Analyses:

1 Volume (gal.):

Notes:

Casing Type:

Screen Length:

Tubing Type:

Sampling Device:

Pump:

Start Pump:

Stop Pump:

Sample Personnel:

Gal./ft.: 1" dia. = 0.006 gal./ft., 2" dia. = 0.022 gal./ft., 4" dia. = 0.087 gal./ft.

Time	Volume	pH	Conductivity (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp. (°C)	Depth to Water (ft.)	Remarks
	Initial							
	1							
	2							
	3							

Appendix D



Alpha Geoscience
679 Plank Road
Clifton Park, New York 12065

GEOLOGIC LOG

Boring ID: MW-1

Page 1 of 1

Project Number/Name: 07108/Camarota Cleaners

Location: Mechanicville, NY

Drilling Contractor/Personnel: AST, Inc.; Mike Sarro (driller), Keith Eiss (helper)

Geologist/Hydrogeologist: J. M. Neubeck

Start: 4/17/07

Finish Date: 4/17/07

Drilling Equip/Method: Geoprobe, direct push

Size/Type of Bit: NA

Sampling Method: 4-ft., 2" diameter macro-core

Well Installed? Yes

Elevation/Ground Surface: not available

Depth to Ground Water from Ground Surface (Date):

REMARKS:

Depth (Ft)	Sample No.	Recovery (ft)	DESCRIPTION	REMARKS
			Med. brown f-m sand, silt, trace gravel, topsoil; moist	
		2.7		
4			Med. brown to dark brown and brown-grey sand, silt, and gravel (to 2"), trace clay in thin seams or pockets; wet near bottom of core.	
		1.4		
8				
		1.2	Grey sand and gravel (shale/siltstone) fragments, wet.	wet at approx. 8.5 - 9, based on core
10				
			Refusal at 10.9 ft.	
12				

Proportions Used: Trace=0-10% Little=10-20% Some=20-35% And=35-50%



Alpha Geoscience
679 Plank Road
Clifton Park, New York 12065

GEOLOGIC LOG

Boring ID: MW-2

Page 1 of 1

Project Number/Name: 07108/Camarota Cleaners

Location: Mechanicville, NY

Drilling Contractor/Personnel: AST, Inc.; Mike Sarro (driller), Keith Eiss (helper)

Geologist/Hydrogeologist: J. M. Neubeck

Start: 4/17/07

Finish Date: 4/17/07

Drilling Equip/Method: Geoprobe, direct push

Size/Type of Bit: NA

Sampling Method: 4-ft., 2" diameter macro-core

Well Installed? Yes

Elevation/Ground Surface: not available

Depth to Ground Water from Ground Surface (Date):

REMARKS:

Depth (ft)	Sample No.	Recovery (ft)	DESCRIPTION	REMARKS
			Med. brown f-c sand, silt, topsoil _ _ _ _ _ 0.5'	
4		1.2		
			Med. brown, tan, light grey (variegated) sand, silt, and large gravel; brick fragments in upper 2 ft.; 0.3' grey clay seam at approx. 6 ft.; soil is tight, moist.	
		1.9		
8			fill 8.0'	wet at 8' below ground surface
10		1.2	Med. brown, grades to tan-brown, f-c sand, silt, and large gravel (to 2" diam.); red brick fragments to 10', wet/saturated.	
			fill 11.5'	
12			Refusal at 11.5 ft.	

Proportions Used: Trace=0-10% Little=10-20% Some=20-35% And=35-50%



Alpha Geoscience
679 Plank Road
Clifton Park, New York 12065

GEOLOGIC LOG

Boring ID: MW-3

Page 1 of 1

Project Number/Name: 07108/Camarota Cleaners

Location: Mechanicville, NY

Drilling Contractor/Personnel: AST, Inc.; Mike Sarro (driller), Keith Eiss (helper)

Geologist/Hydrogeologist: J. M. Neubeck

Start: 4/17/07

Finish Date: 4/17/07

Drilling Equip/Method: Geoprobe, direct push

Size/Type of Bit: NA

Sampling Method: 4-ft., 2" diameter macro-core

Well Installed? Yes

Elevation/Ground Surface: not available

Depth to Ground Water from Ground Surface (Date):

REMARKS:

Depth (ft)	Sample No.	Recovery (ft)	DESCRIPTION	REMARKS
			Med. brown sand, silt, trace brick and large gravel, (topsoil); moist	
		1.3		
4			Variegated tan, orange-brown, blue-grey silty clay, trace large gravel (to 2"); firm/stiff, moist.	
		2.6		
8				
				wet at approx. 8 ft.
10		4.0	Variegated (med, brown, grey-brown, orange-brown, and light green-grey) fine to coarse sand and gravel, little silt, trace clay; saturated, loose.	
12				
			Refusal at 12.2 ft.	

Proportions Used: Trace=0-10% Little=10-20% Some=20-35% And=35-50%



Alpha Geoscience
679 Plank Road
Clifton Park, New York 12065

GEOLOGIC LOG

Boring ID: MW-4

Page 1 of 1

Project Number/Name: 07108/Camarota Cleaners

Location: Mechanicville, NY

Drilling Contractor/Personnel: AST, Inc.; Mike Sarro (driller), Keith Eiss (helper)

Geologist/Hydrogeologist: J. M. Neubeck

Start: 4/17/07

Finish Date: 4/27/07

Drilling Equip/Method: Geoprobe, direct push

Size/Type of Bit: NA

Sampling Method: 4-ft., 2" diameter macro-core

Well Installed? Yes

Elevation/Ground Surface: not available

Depth to Ground Water from Ground Surface (Date):

REMARKS:

Depth (Ft)	Sample No.	Recovery (ft)	DESCRIPTION	REMARKS
			Dark brown, dark grey sand, silt, gravel and ash (cinders); moist	
		1.5	1.5'	
4			Orange-brown to brown f-c. sand, silt, gravel (to 2") and clay; moist. Soil is tight, within clayey matrix.	
		2.4		
8			8'	wet at 8', based on core
10		3.1	Light orange-brown f-c sand, and gravel (to 2"), little silt, trace (-) clay; loose, saturated.	
			11.5'	
12			Refusal at 11.5 ft.	

Proportions Used: Trace=0-10% Little=10-20% Some=20-35% And=35-50%

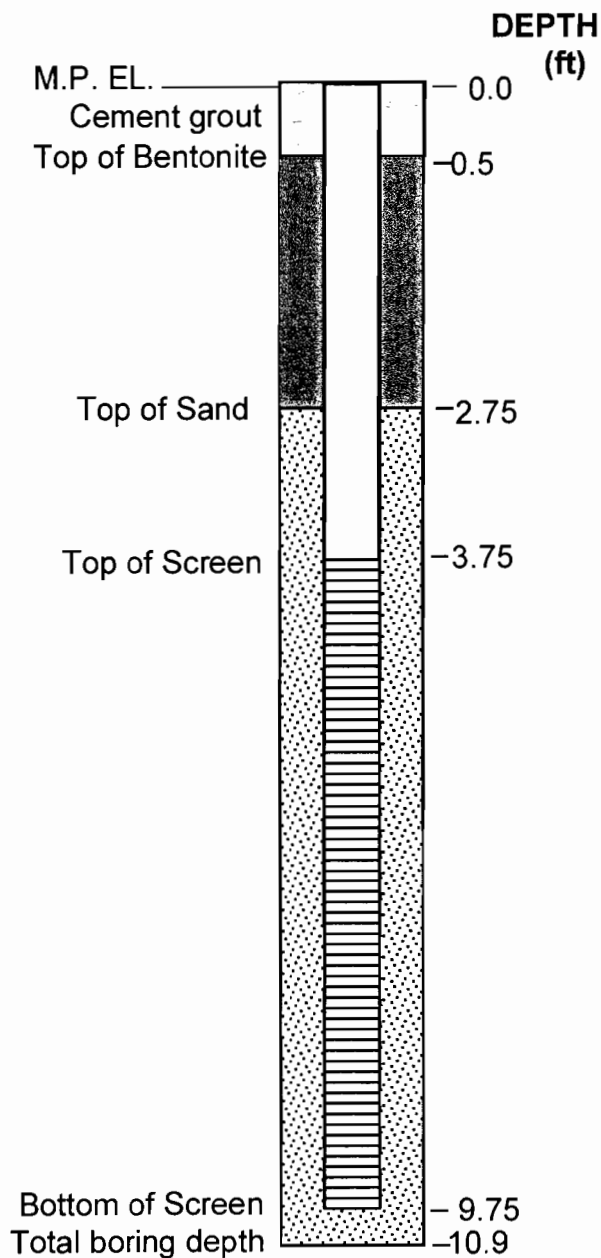
MONITORING WELL COMPLETION LOG



679 Plank Road
Clifton Park, New York
(518) 348-6995

Well MW-1
Project Camarota Cleaners
Project No. 07108
Client Royal R. Dyer Construction
Date Drilled 4/17/07
Date Developed 4/17/07

WELL CONSTRUCTION DETAILS



INSPECTION NOTES

Geologist J. M. Neubeck
Drilling Contractor ADT, Inc.
Type of Well Monitoring
Static Water Level 4.93* Date 4/17/07
Measuring Point Top of PVC
Total Well Depth 9.75 feet below ground surface
*Measured before well development

Riser Pipe

Material Sch. 40 PVC Diameter 1 inch (I.D.)
Length 3.7 feet Joint Type flush-threaded

Screen

Material Sch. 40 PVC Diameter 1 inch (I.D.)
Slot Size 10 Slot Length 6 feet
Stratigraphic Unit Screened _____

Packing

Sand No. 1 Gravel _____ Natural 9.75-10.9 feet
Amount 0.3 bag Interval 2.75-9.75 feet

Seal hydrated granular bentonite Interval 0.5-2.75 feet

Locking Case: _____ Yes ☐ No ☒
Diameter 5 inches - curb box

Notes:

1. Developed well by manually bailing 1.25 gallons. Water is highly turbid and silty, "muddy" brown. No odor or sheen. Water level declined at least 1.5 feet while bailing. Water level recovered to 5.4' within 5 minutes.
2. Flush-mounted curb box installed at grade.

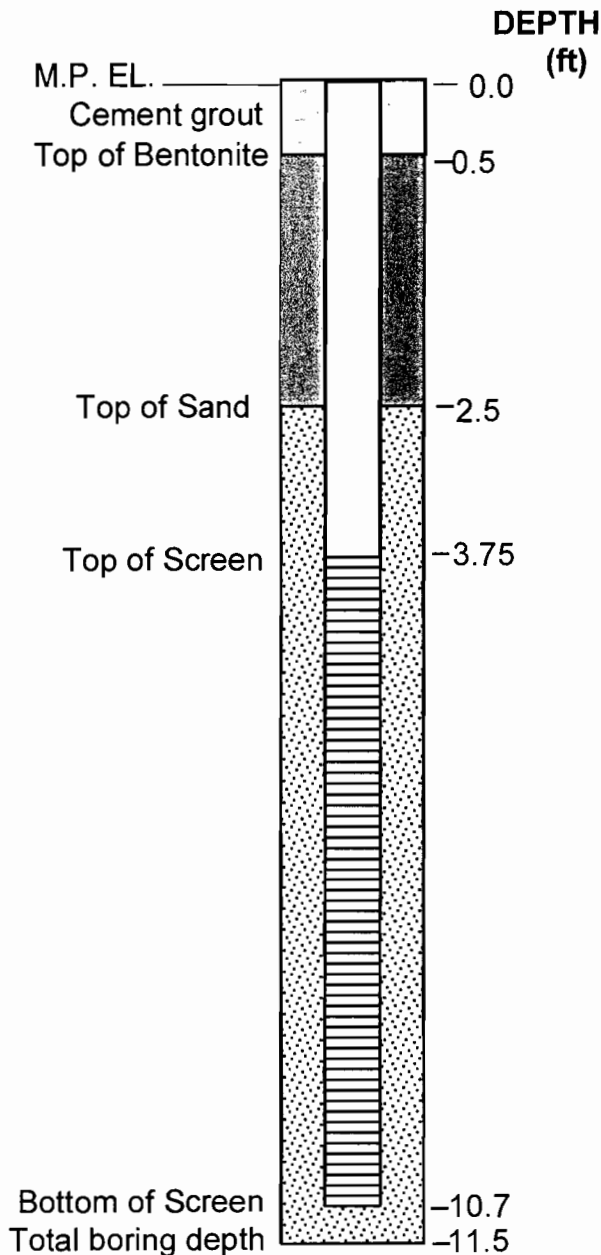
MONITORING WELL COMPLETION LOG



679 Plank Road
Clifton Park, New York
(518) 348-6995

Well MW-2
Project Camarota Cleaners
Project No. 07108
Client Royal R. Dyer Construction
Date Drilled 4/17/07
Date Developed 4/17/07

WELL CONSTRUCTION DETAILS



INSPECTION NOTES

Geologist J. M. Neubeck
Drilling Contractor ADT, Inc.
Type of Well Monitoring
Static Water Level 5.33* Date 4/17/07
Measuring Point Top of PVC
Total Well Depth 10.7 feet below ground surface
*Measured before well development

Riser Pipe

Material Sch. 40 PVC Diameter 1 inch (I.D.)
Length 3.6 feet (approx) Joint Type flush-threaded

Screen

Material Sch. 40 PVC Diameter 1 inch (I.D.)
Slot Size 10 Slot Length 7 feet
Stratigraphic Unit Screened _____

Packing

Sand No. 1 Gravel _____ Natural 10.7-11.5 feet
Amount 1/2+ bag Interval 2.5 to 10.7 feet

Seal

hydrated granular
Type bentonite 1/2 bag Interval 0.5- 2.5 feet
& 1/4 bag chips

Locking Case: _____ Yes ☐ No ☒

Diameter 5 inches - curb box

Notes:

1. Developed well by manually bailing 2 gallons. Water remained silty, very high turbidity, "muddy" medium brown. No sheen, no odor. Water level recovered to 5.35' (from 5.33) within approx. 5 minutes.
2. Flush-mounted curb box installed at grade.

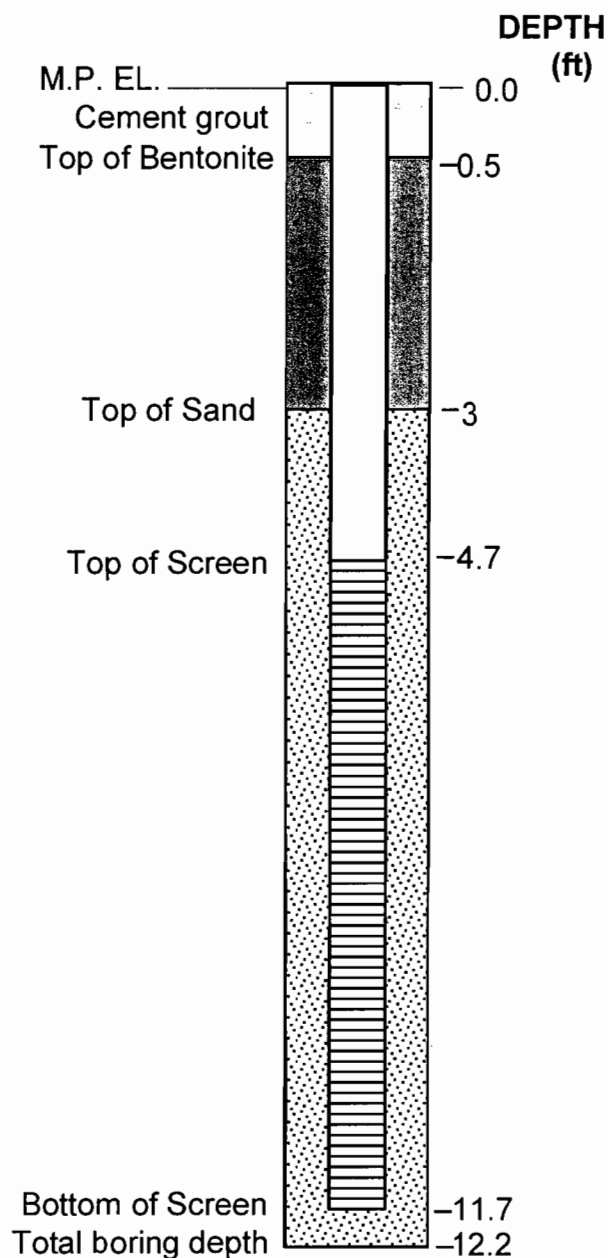
MONITORING WELL COMPLETION LOG



679 Plank Road
Clifton Park, New York
(518) 348-6995

Well MW-3
Project Camarota Cleaners
Project No. 07108
Client Royal R. Dyer Construction
Date Drilled 4/17/07
Date Developed 4/17/07

WELL CONSTRUCTION DETAILS



INSPECTION NOTES

Geologist J. M. Neubeck
Drilling Contractor ADT, Inc.
Type of Well Monitoring
Static Water Level 5.12* Date 4/17/07
Measuring Point Top of PVC
Total Well Depth 11.7 feet below ground surface
*Measured before well development

Riser Pipe

Material Sch. 40 PVC Diameter 1 inch (I.D.)
Length 4.6 feet (approx) Joint Type flush-threaded

Screen

Material Sch. 40 PVC Diameter 1 inch (I.D.)
Slot Size 10 Slot Length 7 feet
Stratigraphic Unit Screened _____

Packing

Sand No. 1 Gravel _____ Natural 11.7-12.2 feet
Amount 1/4+ bag Interval 3 to 11.7 feet

Seal

hydrated
Type granular Interval 0.5- 3 feet
bentonite

Locking Case: _____ Yes ☐ No ☒
Diameter 5 inches - curb box

Notes:

1. Developed well by manually bailing approx. 0.75 gallons. Water level declines quickly - bailed to within 0.5 - 1' of water and let recover between well volumes. Water level recovers to at least 3' water column within 10 minutes. Water is silty and very turbid, brown. No odor, no sheen. Water level recovered to 5.85' (from 5.12) within 30 minutes.
2. Flush-mounted curb box installed at grade.

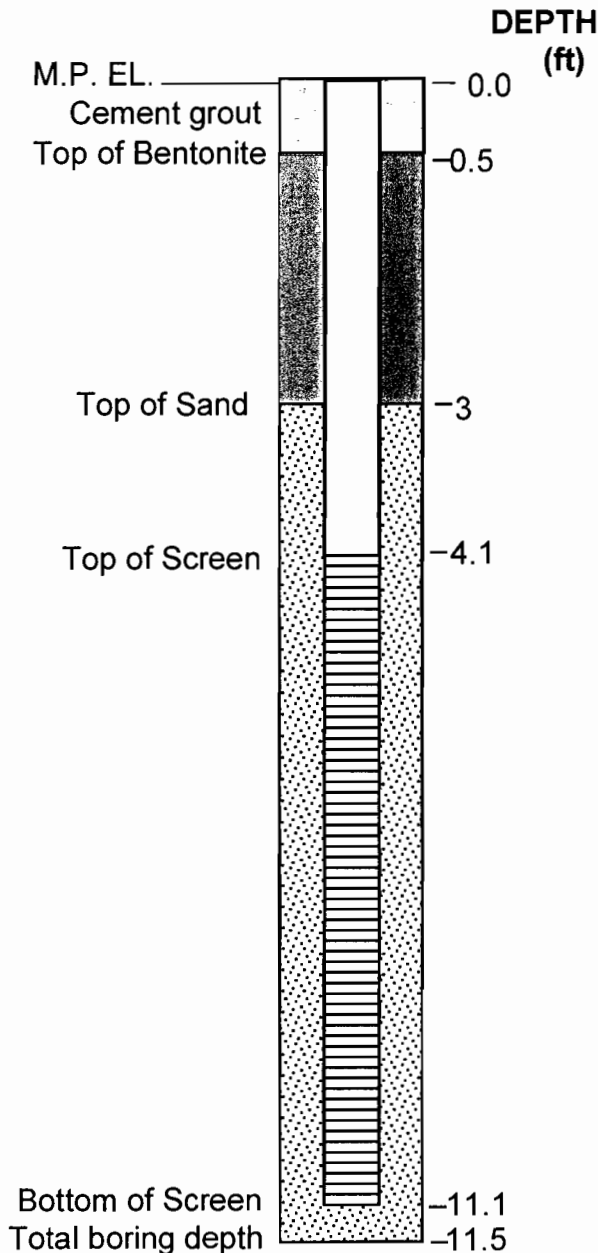
MONITORING WELL COMPLETION LOG



679 Plank Road
Clifton Park, New York
(518) 348-6995

Well MW-4
Project Camarota Cleaners
Project No. 07108
Client Royal R. Dyer Construction
Date Drilled 4/17/07
Date Developed 4/17/07

WELL CONSTRUCTION DETAILS



INSPECTION NOTES

Geologist J. M. Neubeck
Drilling Contractor ADT, Inc.
Type of Well Monitoring
Static Water Level 5.34* Date 4/17/07
Measuring Point Top of PVC
Total Well Depth 11.1 feet below ground surface
*Measured before well development

Riser Pipe

Material Sch. 40 PVC Diameter 1 inch (I.D.)
Length 4.0 feet (approx) Joint Type flush-threaded

Screen

Material Sch. 40 PVC Diameter 1 inch (I.D.)
Slot Size 10 Slot Length 7 feet
Stratigraphic Unit Screened fill

Packing

Sand No. 1 Gravel _____ Natural 11.1-11.5 feet
Amount 1/3 bag Interval 3 to 11.1 feet

Seal

Type granular Interval 0.5- 3 feet
bentonite (3-4 pounds)

Locking Case: _____ Yes ☐ No ☒

Diameter 5 inches - curb box

Notes:

1. Developed well by manually bailing 1.25 gallons. Water contained appreciable silt & clay, very turbid "muddy" med. brown, with a trace "wispy", grey, dull film. (Appreciable ash was observed in test pit on south side) No odor in water. Water level recovers fairly rapidly.
2. Flush-mounted curb box installed at grade.



EA Engineering, P.C.

EA Science and Technology

LOG OF SOIL BORING

Coordinates: _____

Surface Elevation: _____

Casing Below Surface: _____

Reference Elevation: _____

Reference Description: _____

Job. No.
14368.22Client: New York State Department of
Environmental ConservationLocation:
Camarota Cleaners

Drilling Method: 4 1/4" hollow stem augers

Soil Boring Number:
MW-05

Sampling Method: 2" Split Spoons

Sheet 1 of 1

Water Lev.

Time

Drilling

Start

Finish

3/10/08
11303/10/2008
1330

Blow Counts (140-lb)	Feet Drvn/Ft. Recvrd	Well Diagram	PID (ppb) HNu	Depth in Feet	USCS Log	Surface Conditions: Grass
6	1/2		0	0		0-0.5 Grass and Organics
4						0.5-1 Black SANDY SILT with SHALE rock fragments. Loose, non-cohesive. Dry
2			0	1		
1						
1	0.5/2		0	2		2-2.4 Black SANDY SILT with SHALE rock fragments. Loose, non-cohesive. Dry
3						2.4-2.5 Black Grey Mottled SILTY CLAY. Tight, cohesive, Moist.
5				3		
14						
18	1.7/1.7		0	4		4-4.25 Black Grey Mottled SILTY CLAY. Tight, cohesive, Moist.
24						4.25-5.7 Weathered dark gray SHALE.
100/2			0	5		Split Spoon Refusal at 5.7 -ft below ground surface
						5.7-15 Dark Gray weathered SHALE.
			0	6		
			0	7		
			0	8		
			0	9		
			0	10		
			0	11		11 Fracture
			0	12		
			0	13		13.5 Fracture
			0	14		
				15		Total Depth of borehole = 15-ft below ground surface
				16		
				17		
				18		
				19		
				20		

Logged by: Joe Von Uderitz

Date: 10 March 2008

Drilling Contractor: Nothnagle Drilling, Inc.

Driller: Steve Loranty

WELL SPECIFICATIONS:

Diam. of casing:	2'	Screen Interval:	5-15' 0.01"	Sand pack:	3-15' #00N	Grout:	NA
BOH:	15'	Riser Interval:	0-5'	Bentonite:	0-3'	Cover:	Flushmount

SOIL SAMPLE COLLECTED YES / NO

Samples Collected for

Sample Depth: _____ feet

Sample Time: _____ Sample Date: _____



EA Engineering, P.C.

EA Science and Technology

LOG OF SOIL BORING

Coordinates: _____

Surface Elevation: _____

Casing Below Surface: _____

Reference Elevation: _____

Reference Description: _____

Job. No.
14368.22Client: New York State Department of
Environmental ConservationLocation:
Camarota Cleaners

Drilling Method: 4 1/4" hollow stem augers

Soil Boring Number:
MW-06

Sampling Method: 2" Split Spoons

Sheet 1 of 1

Water Lev. _____

Time _____

Start

Finish

3/10/08
14003/10/2008
1600

Blow Counts (140-lb)	Feet Drvn/Ft. Recvrd	Well Diagram	PID (ppb) HNu	Depth in Feet	USCS Log	Surface Conditions: Grass
4	1/2		0	0		0-0.25 Grass and Organics
3						0.25-1 Black SANDY SILT with SHALE rock fragments. Loose, non-cohesive. Dry
2			0	1		
3						
2	0.5/2		0	2		2-2.25 Black SANDY SILT with SHALE rock fragments. Loose, non-cohesive. Dry
4						
4				3		
4						
2	0.5/2		0	4		4-4.1 Black SANDY SILT with SHALE rock fragments. Loose, non-cohesive. Wet
3						4.1-4.5 Black SILTY CLAY. Tight, cohesive, moist.
3				5		
2						
3	0.3/2		0	6		6-6.3 Light gray brown mottled SILTY CLAY with trace SAND. Tight, cohesive. Moist
4						
4				7		
5						
7	0/4/2		0	8		8-8.2 Light gray brown mottled SILTY CLAY with trace SAND. Tight, cohesive. Moist
12						8.2-8.4 Weathered grey SHALE
100/6			0	9		8.4-12 Weathered grey SHALE
			0	10		
			0	11		
			0	12		Total Depth of borehole = 12-ft below ground surface
				13		
				14		
				15		
				16		
				17		
				18		
				19		
				20		

Logged by: Joe Von Uderitz

Date: 10 March 2008

Drilling Contractor: Nothnagle Drilling, Inc.

Driller: Steve Loranty

WELL SPECIFICATIONS:

Diam. of casing: 2' Screen Interval: 4-12' 0.01" Sand pack: 3-12' #00N Grout: NA
 BOH: 12' Riser Interval: 0-4' Bentonite: 0-3' Cover: Flushmount

SOIL SAMPLE COLLECTED YES / NO

Samples Collected for

Sample Depth: _____ feet

Sample Time: _____ Sample Date: _____



EA Engineering, P.C.

EA Science and Technology

LOG OF SOIL BORING

Coordinates: _____

Surface Elevation: _____

Casing Below Surface: _____

Reference Elevation: _____

Reference Description: _____

Job. No.
14368.22Client: New York State Department of
Environmental ConservationLocation:
Camarota Cleaners

Drilling Method: 4 1/4" hollow stem augers

Soil Boring Number:
MW-07

Sampling Method: 2" Split Spoons

Sheet 1 of 1

Water Lev. _____

Time _____

Start

Finish

3/10/08
16003/10/2008
1800

Blow Counts (140-lb)	Feet Drvn/Ft. Recvrd	Well Diagram	PID (ppb) HNu	Depth in Feet	USCS Log	Surface Conditions: Grass
4	1/2		0	0		0-0.25 Grass and Organics
3						0.25-1 Black SANDY SILT with SHALE rock fragments. Loose, non-cohesive. Dry
5			0	1		
2	0/2					
4				2		2-4 No Recovery
5						
6	0.5/2			3		
7						
4			0	4		4-4.5 Weathered SHALE
11						Large piece of concrete at 4.5-ft
12			0	5		4.5-7.5 Concrete boulders
15						
			0	6		
			0	7		
						7.5-10 Dark Gray Weathered SHALE. Wet at 8.5-ft
			0	8		
			0	9		
				10		Total Depth of borehole = 10-ft below ground surface
				11		
				12		
				13		
				14		
				15		
				16		
				17		
				18		
				19		
				20		

Logged by: Joe Von Uderitz

Date: 10 March 2008

Drilling Contractor: Nothnagle Drilling, Inc.

Driller: Steve Loranty

WELL SPECIFICATIONS:

Diam. of casing:	2'	Screen Interval:	5-10' 0.01"	Sand pack:	3-10' #00N	Grout:	NA
BOH:	10'	Riser Interval:	0-5'	Bentonite:	0-3'	Cover:	Flushmount

SOIL SAMPLE COLLECTED YES / NO

Samples Collected for

Sample Depth: _____ feet


Sample Time: _____ Sample Date: _____

<div style="display: flex; align-items: center;"> <div> EA Engineering, P.C. EA Science and Technology LOG OF SOIL BORING </div> </div> <div style="margin-top: 10px;"> Coordinates: _____ Surface Elevation: _____ Casing Below Surface: _____ Reference Elevation: _____ Reference Description: _____ </div>				Job. No. 14368.22	Client: New York State Department of Environmental Conservation				Location: Camarota Cleaners			
				Drilling Method: 4 1/4" hollow stem augers				Soil Boring Number: MW-08				
				Sampling Method: 2" Split Spoons				Sheet 1 of 1				
								Drilling				
				Water Lev. _____				Start		Finish		
Time _____				3/11/08 0930		3/11/2008 1300						
Blow Counts (140-lb)	Feet Drvn/Ft. Recvrd	Well Diagram	PID (ppb) HNu	Depth in Feet	USCS Log	Surface Conditions: Grass Weather: Sunny Temperature: 35-F						
5	1.25/2		0	0		0-0.5 Grass and Organics						
6			0	1		0.5-1.25 Black SANDY SILT with SHALE/SANDSTONE rock fragments. Loose, non-cohesive. Moist						
5				2		2-2.5 Black SANDY SILT with some CLAY. Tight, Semi-cohesive.						
4				3		2.5-3 Light brown SILTY SAND. Loose, non-cohesive. Damp						
3	1/2			0	4		4-5 Light brown SILTY CLAY with some SAND. SANDSTONE and SHALE rock fragments. Loose, semi-cohesive. Dry					
4			5									
5			6			6-8 No Recovery						
4			7									
5	1/2		0	8		8-9.5 Brown SAND SILT CLAY and weathered SHALE.						
6				9		Split Spoon refusal at 9.5-ft below ground surface						
7				10		9.5-15 Weathered grey SHALE.						
7				11		Augered from 9.5-15. Tried coring, did not have a good enough seal, augered to 20-ft below ground surface. At 20-ft had good seal. HQ rock cored from 20-30-ft						
8	0/2		0	12								
6				13								
9				14								
14				15		15-20 Dark Grey SHALE						
10	1.5/1.5		0	16								
16				17								
38				18								
				19								
				20		20-25 Dark Grey SHALE RQD = 17/60 = 28 % Poor						
				21								
				22								
				23		23.5 Fracture						
				24		24.5 Fracture						
				25		25-30 Dark Grey SHALE RQD = 47/60 = 78 % Good						
				26								
				27								
				28		28-28.5 Small Calcite vein						
				29		29 Small fracture						
						29.5 -30 Fractured						
				0	30		Total Depth of borehole = 30-ft below ground surface					

Logged by: <u>Joe Von Uderitz</u>	Date: <u>11 March 2008</u>
Drilling Contractor: <u>Nothnagle Drilling, Inc.</u>	Driller: <u>Steve Loranty</u>

WELL SPECIFICATIONS:

Diam. of casing: <u>2'</u>	Screen Interval: <u>20-30' 0.01"</u>	Sand pack: <u>18-30' #00N</u>	Grout: <u>0-18'</u>
BOH: <u>30'</u>	Riser Interval: <u>0-20'</u>	Bentonite: <u>16-18'</u>	Cover: <u>Flushmount</u>

 EA Engineering, P.C. EA Science and Technology LOG OF SOIL BORING				Job. No. 14368.22 Client: New York State Department of Environmental Conservation		Location: Camarota Cleaners	
Coordinates: _____ Surface Elevation: _____ Casing Below Surface: _____ Reference Elevation: _____ Reference Description: _____				Drilling Method: 4 1/4" hollow stem augers HQ Rock Coring		Soil Boring Number: MW-09	
				Sampling Method: 2" Split Spoons		Sheet 1 of 1	
				Drilling			
				Water Lev. _____ Time _____		Start 3/11/08 1330 Finish 3/11/2008 1900	
Blow Counts (140-lb)	Feet Drvn/Ft. Recvrd	Well Diagram	PID (ppb) HNu	Depth in Feet	USCS Log	Surface Conditions: Grass Weather: Sunny Temperature: 35-F	
2	1/2		0	0		0-0.25 Grass and Organics	
4						0.25-1 Brown Medium SAND with COBBLES. Loose, non-cohesive.	
6			0	1			
7							
4	0/2			2		2-4 No recovery, brick chunk in end of split spoon	
3							
4							
4							
3	1/2		0	4		4-5 Brown SILTY CLAY with orange brown Medium SAND. Tight, cohesive.	
2						Trace coal at 4.5-ft	
3			0	5			
2							
4	1/2		0	6		6-7 Brown SILTY CLAY with orange brown Medium SAND. Tight, cohesive.	
6						Some SANDSTONE rock fragements.	
7			0	7			
15							
4	2-Jan		0	8		8-8.25 Brown SILTY CLAY with orange brown Medium SAND. Tight, cohesive.	
3						8.25-9 Light grey weathered SHALE with brown SILTY SAND. Saturated	
4			0	9			
7							
1	0/2		0	10		10-12 No Recovery	
2							
1			0	11		Augered from 12-20. Tried coring, did not have a good enough seal, augered to 20-ft below ground surface. At 23-ft had good seal. HQ rock cored from 23-33-ft	
2							
100/5			0	12			
			0	13			
			0	14			
			0	15		15-20 Dark Grey SHALE	
			0	16			
			0	17			
			0	18			
			0	19			
			0	20		20-23 Dark Grey SHALE	
			0	21			
			0	22		22 Fracture	
			0	23		23-28 Dark Grey SHALE	
						RQD = 23/60 = 38 % Poor	
			0	24		23.5 Fracture	
			0	25			
						25.5 Fracture	
			0	26			
			0	27			
			0	28		28-33 Dark Grey SHALE	
						RQD = 50/60 = 83 % Good	
			0	29		28 / 28 Fractures	
						29-33 Very competent bedrock	
			1	30			
			0	31			
			0	32			
				33		Total Depth of borehole = 33-ft below ground surface	

Logged by:	Joe Von Uderitz		Date:	11 March 2008	
Drilling Contractor:	Nothnagle Drilling, Inc.		Driller:	Steve Lranty	
WELL SPECIFICATIONS:					
Diam. of casing:	2'	Screen Interval:	23-33' 0.01"	Sand pack:	21-33' #00N
BOH:	33'	Riser Interval:	0-23'	Bentonite:	19-21'
				Grout:	0-19'
				Cover:	Flushmount

Appendix E

WELL DECOMMISSIONING RECORD

* Sketch in all relevant decommissioning data, including:
interval overdrilled, interval grouted, casing left in hole,
well stickup, etc.

Appendix F



Maintenance Request Form

Import Sys Data

☐ Check box if
new sys info

System Information

System ID: _____

Tracking ID: _____

Owner Name: _____

Site No: _____

System Address: _____

Site Name: _____

City: _____ Zip: _____

Telephone: _____

Date Installed: _____

Alt. Telephone: _____

Last Inspection: _____

Maintenance Request

Requester: _____

☐ Owner ☐ Tenant ☒ Other

Telephone: _____

Date of Request: _____

Problem type (check all that apply): ☐ Fan noise ☐ Vibration ☐ Condensate ☐ Manometer ☐ Other

Stated Problem:

Investigation

Performed By: _____

Company: _____

Date: _____

Findings:

Proposed Actions:

Are proposed actions estimated to cost more than \$500 (est.)? ☐ Yes ☒ No

Repairs

Performed By: _____ Company: _____

Date: _____

Actions Taken:

Materials:

Was all work performed in accordance with current protocols? ☐ Yes ☐ No

Deviations/Comments:

Was redline drawing made or as-built updated? ☐ Yes ☐ No

Was the action reviewed with the owner or tenant? ☐ Yes ☐ No

Was the area left in the manner it was found? ☐ Yes ☐ No

Was the system performance altered? ☐ Yes ☐ No

Re-commissioning activities completed? ☐ Yes ☐ No

Supervisor Review

Supervisor: _____ Date: _____

Forms completed fully? ☐ Yes ☐ No ☐ N/A

Drawings updated as needed? ☐ Yes ☐ No ☐ N/A

Documentation printed and filed? ☐ Yes ☐ No ☐ N/A

Completed letter sent? ☐ Yes ☐ No ☐ N/A

All required activities completed and request closed? ☐ Yes ☐ No ☐ N/A

Actual costs (\$): _____ Actual hours: _____

Export Data

Print Form

Submit by Email

Appendix G



Periodic Operations Visit Form

☐ Check box if
new sys info

System ID: _____

Date of Visit: _____

Owner Name: _____

Date Installed: _____

System Address: _____

Telephone: _____

City: _____ Zip: _____

Alt. Telephone: _____

Performed By: _____

Site No: _____

Company: _____

Site Name: _____

Fan Operation Confirmation

EXTERIOR

	Fan #1	Fan #2	Fan #3
Fan Model No(s).	_____	_____	_____
Is Fan Operating (arrival)?	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No
Confirmation Method	_____	_____	_____
Is Fan Operating (departure)?	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No

Requested to inspect interior system components? ☐ Yes ☐ No

If yes, when and by whom? _____ Date: _____

INTERIOR

Structural Review

Notes

Change in building footprint since last inspection? ☐ Yes ☐ NoBasement occupied (>4 hrs per day)? ☐ Yes ☐ NoHeating/ventilation system modifications? ☐ Yes ☐ NoCrawlspace inspected? ☐ Yes ☐ NoLarge cracks in floor or near sumps? ☐ Yes ☐ NoWall penetrations or cracks noted? ☐ Yes ☐ No

Piping, Slab & Wall

Are system suction points sealed? ☐ Yes ☐ NoIs piping system in need of repair? ☐ Yes ☐ No

Miscellaneous

Are manometer levels equal? ☐ Yes ☐ NoAre system labels accurate and applied correctly? ☐ Yes ☐ NoMaintenance completed (check all that apply): ☐ Replace fan ☐ Seal pipe ☐ Electrical ☐ Other

Describe repairs made and any proposed actions requiring a subsequent visit (if necessary): _____

Appendix H

**Site-Wide Inspection List
Camarota Cleaners Site
325 Park Avenue, Mechanicville, NY**

Date of Inspection: _____

Inspection by: _____

Site-wide inspections will be performed to assess the following:

1. Reason for inspection? _____
2. Is the Site Management Plan present at the site? _____
3. Verify owner contact information for the site? _____

4. Is the site occupied and if so used for? _____

5. Has the building footprint changed? _____
6. Is the on-site vapor mitigation system working as designed? _____

7. Is a potable well present on site? _____
8. Condition of monitoring wells? _____

9. Any sampling or testing performed? _____

10. Provide any details regarding site conditions and attach photographs as needed. _____

