

RECORD OF DECISION

Villa Cleaners
State Superfund Project
Deer Park, Suffolk County
Site No. 152188
March 2012



Prepared by
Division of Environmental Remediation
New York State Department of Environmental Conservation

DECLARATION STATEMENT - RECORD OF DECISION

Villa Cleaners
State Superfund Project
Deer Park, Suffolk County
Site No. 152188
March 2012

Statement of Purpose and Basis

This document presents the remedy for the Villa Cleaners site, a Class 2 inactive hazardous waste disposal site. The remedial program was chosen in accordance with the New York State Environmental Conservation Law and Title 6 of the Official Compilation of Codes, Rules and Regulations of the State of New York (6 NYCRR) Part 375, and is not inconsistent with the National Oil and Hazardous Substances Pollution Contingency Plan of March 8, 1990 (40CFR300), as amended.

This decision is based on the Administrative Record of the New York State Department of Environmental Conservation (the Department) for the Villa Cleaners site and the public's input to the proposed remedy presented by the Department. A listing of the documents included as a part of the Administrative Record is included in Appendix B of the ROD.

Description of Selected Remedy

During the course of the investigation certain actions, known as interim remedial measures (IRMs), were undertaken at the above referenced site. An IRM is conducted at a site when a source of contamination or exposure pathway can be effectively addressed before completion of the remedial investigation (RI) or feasibility study (FS). The IRM(s) undertaken at this site are discussed in Section 6.2.

Based on the implementation of the IRM(s), the findings of the investigation of this site indicate that the site no longer poses a threat to human health or the environment; therefore No Further Action is the selected remedy. The remedy may include continued operation of a remedial system if one was installed during the IRM and the implementation of any prescribed institutional controls/engineering controls (ICs/ECs) that have been identified as being part of the remedy for the site.

The IRM(s) conducted at the site attained the remediation objectives identified for this site in Section 6.5 for the protection of public health and the environment.

New York State Department of Health Acceptance

The New York State Department of Health (NYSDOH) concurs that the remedy for this site is protective of human health.

Declaration

The selected remedy is protective of human health and the environment, complies with State and Federal requirements that are legally applicable or relevant and appropriate to the remedial action to the extent practicable, and is cost effective. This remedy utilizes permanent solutions and alternative treatment or resource recovery technologies, to the maximum extent practicable, and satisfies the preference for remedies that reduce toxicity, mobility, or volume as a principal element.

March 28, 2012

Date



Robert W. Schick, P.E., Acting Director
Division of Environmental Remediation

RECORD OF DECISION

Villa Cleaners
Deer Park, Suffolk County
Site No. 152188
March 2012

SECTION 1: SUMMARY AND PURPOSE

The New York State Department of Environmental Conservation (the Department), in consultation with the New York State Department of Health (NYSDOH), has selected a remedy for the above referenced site. The disposal of hazardous wastes at the site resulted in threats to public health and the environment that were addressed by actions known as interim remedial measures (IRMs), which were undertaken at the site. An IRM is conducted at a site when a source of contamination or exposure pathway can be effectively addressed before completion of the remedial investigation (RI) or feasibility study (FS). The IRMs undertaken at this site are discussed in Section 6.2.

Based on the implementation of the IRM(s), the findings of the investigation of this site indicate that the site no longer poses a threat to human health or the environment. The IRM(s) conducted at the site attained the remediation objectives identified for this site, which are presented in Section 6.5, for the protection of public health and the environment. No Further Action is the remedy selected by this Record of Decision (ROD). A No Further Action remedy may include site management, which will include continued operation of any remedial system installed during the IRM and the implementation of any prescribed controls that have been identified as being part of the remedy for the site. This ROD identifies the IRM(s) conducted and discusses the basis for No Further Action.

The New York State Inactive Hazardous Waste Disposal Site Remedial Program (also known as the State Superfund Program) is an enforcement program, the mission of which is to identify and characterize suspected inactive hazardous waste disposal sites and to investigate and remediate those sites found to pose a significant threat to public health and environment.

The Department has issued this document in accordance with the requirements of New York State Environmental Conservation Law and 6 NYCRR Part 375. This document is a summary of the information that can be found in the site-related reports and documents.

SECTION 2: CITIZEN PARTICIPATION

The Department seeks input from the community on all remedies. A public comment period was held, during which the public was encouraged to submit comment on the proposed remedy. All comments on the remedy received during the comment period were considered by the Department in selecting a remedy for the site. Site-related reports and documents were made

available for review by the public at the following document repository:

Deer Park Public Library
Attn: Gail Pepa - Library Director
44 Lake Road
Deer Park, NY 11729-6047
Phone:

A public meeting was also conducted. At the meeting, the findings of the remedial investigation (RI) and the feasibility study (FS) were presented along with a summary of the proposed remedy. After the presentation, a question-and-answer period was held, during which verbal or written comments were accepted on the proposed remedy.

Comments on the remedy received during the comment period are summarized and addressed in the responsiveness summary section of the ROD.

Receive Site Citizen Participation Information By Email

Please note that the Department's Division of Environmental Remediation (DER) is "going paperless" relative to citizen participation information. The ultimate goal is to distribute citizen participation information about contaminated sites electronically by way of county email listservs. Information will be distributed for all sites that are being investigated and cleaned up in a particular county under the State Superfund Program, Environmental Restoration Program, Brownfield Cleanup Program, Voluntary Cleanup Program, and Resource Conservation and Recovery Act Program. We encourage the public to sign up for one or more county listservs at <http://www.dec.ny.gov/chemical/61092.html>

SECTION 3: SITE DESCRIPTION AND HISTORY

Location: The Villa Cleaners site is located at 1899 Deer Park Avenue in a commercial area in the Hamlet of Deer Park, Town of Babylon, Suffolk County, New York.

Site Features: The site occupies one and one half acres on the east side of Deer Park Avenue, which runs approximately north-south in the vicinity of the site. The site is bordered to the north by the Long Island Railroad which is about 12 feet above the property. The properties to the south are occupied by a one-story commercial business. To the east, the property borders the front lawn of a public school administration building.

Current Zoning/Use(s): The site contains a single-story, multi-tenant commercial building which was built in 1965. Villa Cleaners is located in the northern portion of the building and has been operating as a dry cleaner since the 1960s. An asphalt parking area is located in the western and southern portions of the site. The building uses on-site septic tanks and leaching pools for the disposal of sanitary wastes. There are five (5) sanitary leaching pool structures located in the western portion of the site, designated as RM-1 through RM-5.

Historical Use(s): Contamination is due to former dry cleaner disposal practices and/or releases

into the sanitary leaching pools. This contamination was discovered in May of 1997 during a Suffolk County Department of Health Services inspection of the onsite leaching pools.

A remedial action was implemented in October 1997 on behalf of the responsible party which included the removal of liquids and sediments from the leaching pools and one storm drain (located at the rear of the property). Additionally, five groundwater screening points were installed and sampled. The results of the groundwater sampling identified chlorinated solvents in the groundwater beneath the site.

The responsible party subsequently entered into the Voluntary Cleanup Program, but was terminated in February of 2004. The site was listed as a Class 2 in March 2004 and an Order on Consent was signed on June 16, 2004. Again the project was terminated for failure to comply with the Order on Consent. To finalize investigation and remedial actions, a State Superfund Referral Memo was signed on March 5, 2008, and a Work Assignment was issued on July 23, 2008.

Site Geology and Hydrology: The site lies at approximately 75 feet above mean sea level. Topography slopes gently from the northeast to the southwest across the site. Underlying the site are the Pleistocene-aged glacial outwash deposits of the upper glacial aquifer. In the vicinity of the site, this aquifer is predominantly sand with some gravel and occasional lenses of finer materials (silt, clay, etc.). A layer of hard clay was identified at depths ranging from approximately 90 feet to 100 feet below ground surface (bgs). The actual thickness of the clay layer in the vicinity of the site is unknown.

The upper glacial aquifer is unconfined (i.e., not overlain by impermeable geologic materials), and water is at approximately 10 feet to 20 feet bgs depending on the season. The aquifer's saturated thickness (i.e. top of water table to bottom of aquifer) ranges from approximately 76 feet to 86 feet across the site. A groundwater elevation contour map constructed from water levels, measured on December 4, 2008, shows that, in general, groundwater flows south-southwest across the site. Groundwater flows across the site at an approximate velocity of 2.4 feet per day. The overall horizontal gradient (i.e., the difference in water table elevation across the site) is 0.0022 foot per foot. The sands of the upper glacial aquifer are assumed to have a hydraulic conductivity (i.e., the aquifer's ability to transmit water across the gradient) of 270 feet per day and an effective porosity (i.e., the open space between the grains of sand, etc. that the water can flow through) of 25 percent.

A site location map is attached as Figure 1.

SECTION 4: LAND USE AND PHYSICAL SETTING

The Department may consider the current, intended, and reasonably anticipated future land use of the site and its surroundings when evaluating a remedy for soil remediation. For this site, an alternative which allows for unrestricted use of the site was evaluated.

A comparison of the results of the investigation against unrestricted use standards, criteria and guidance values (SCGs) for the site contaminants is included in the Tables for the media being

evaluated in Exhibit A.

SECTION 5: ENFORCEMENT STATUS

Potentially Responsible Parties (PRPs) are those who may be legally liable for contamination at a site. This may include past or present owners and operators, waste generators, and haulers.

The PRPs for the site, documented to date, include:

Vionpa Dry Cleaners, Inc. d/b/a Villa Dry Cleaners

Vionpa Dry Cleaners, Inc. d/b/a Villa Dry Cleaners

The PRPs for the site declined to implement a remedial program when requested by the Department. After the remedy is selected, the PRPs will again be contacted to assume responsibility for the remedial program. If an agreement cannot be reached with the PRPs, the Department will evaluate the site for further action under the State Superfund. The PRPs are subject to legal actions by the state for recovery of all response costs the state has incurred.

SECTION 6: SITE CONTAMINATION

6.1: Summary of the Remedial Investigation

A Remedial Investigation (RI) has been conducted. The purpose of the RI was to define the nature and extent of any contamination resulting from previous activities at the site. The field activities and findings of the investigation are described in the RI Report.

The following general activities are conducted during an RI:

- Research of historical information,
- Geophysical survey to determine the lateral extent of wastes,
- Test pits, soil borings, and monitoring well installations,
- Sampling of waste, surface and subsurface soils, groundwater, and soil vapor,
- Sampling of surface water and sediment,
- Ecological and Human Health Exposure Assessments.

The analytical data collected on this site includes data for:

- groundwater
- soil
- soil vapor

- indoor air

6.1.1: Standards, Criteria, and Guidance (SCGs)

The remedy must conform to promulgated standards and criteria that are directly applicable or that are relevant and appropriate. The selection of a remedy must also take into consideration guidance, as appropriate. Standards, Criteria and Guidance are hereafter called SCGs.

To determine whether the contaminants identified in various media are present at levels of concern, the data from the RI were compared to media-specific SCGs. The Department has developed SCGs for groundwater, surface water, sediments, and soil. The NYSDOH has developed SCGs for drinking water and soil vapor intrusion. The tables found in Exhibit A list the applicable SCG in the footnotes. For a full listing of all SCGs see: <http://www.dec.ny.gov/regulations/61794.html>

6.1.2: RI Results

The data have identified contaminants of concern. A "contaminant of concern" is a hazardous waste that is sufficiently present in frequency and concentration in the environment to require evaluation for remedial action. Not all contaminants identified on the property are contaminants of concern. The nature and extent of contamination and environmental media requiring action are summarized in Exhibit A. Additionally, the RI Report contains a full discussion of the data. The contaminant(s) of concern identified at this site is/are:

TETRACHLORETHENE

Based on the investigation results, comparison to the SCGs, and the potential public health and environmental exposure routes, certain media and areas of the site required remediation. These media were addressed by the IRM(s) described in Section 6.2. More complete information can be found in the RI Report and the IRM Construction Completion Report.

6.2: Interim Remedial Measures

An interim remedial measure (IRM) is conducted at a site when a source of contamination or exposure pathway can be effectively addressed before issuance of the Record of Decision.

The following IRM(s) has/have been completed at this site based on conditions observed during the RI.

IRM - Multiple Sub Slab Depressurization Systems

Mitigation measures, consisting of sub-slab depressurization systems, were installed and operational in July 2011 at both on-site building locations and at the off-site building immediately north of the site to address the potential for soil vapor intrusion to impact indoor air.

6.3: Summary of Environmental Assessment

This section summarizes the assessment of existing and potential future environmental impacts presented by the site. Environmental impacts may include existing and potential future exposure pathways to fish and wildlife receptors, wetlands, groundwater resources, and surface water.

Based upon the resources and pathways identified and the toxicity of the contaminants of ecological concern at this site, a Fish and Wildlife Resources Impact Analysis (FWRIA) was deemed not necessary for OU 01.

Nature and Extent of Contamination OU1: Remediation at this site is complete. Prior to remediation, the primary contaminants of concern included chlorinated solvents, such as tetrachloroethene (PCE) and its breakdown products.

Although indoor air sampling to evaluate exposure to site-related contaminants warranted no further actions, sub-slab sampling showed the potential for soil vapor intrusion. Mitigation measures, consisting of sub-slab depressurization systems, were installed and operational in July 2011 at both on-site building locations and at the off-site building immediately north of the site to address the potential for soil vapor intrusion to impact indoor air.

Significant Threat: The site has been investigated and no longer presents a significant environmental threat.

6.4: Summary of Human Exposure Pathways

This human exposure assessment identifies ways in which people may be exposed to site-related contaminants. Chemicals can enter the body through three major pathways (breathing, touching or swallowing). This is referred to as *exposure*.

Drinking contaminated groundwater is not expected because on-site buildings and adjacent properties are serviced by a public water supply that obtains its water from a source not affected by this site. Volatile organic compounds in the groundwater or soils may move into the soil vapor (air spaces within the soil), which in turn may move into overlying buildings and affect indoor air quality. This process, which is similar to the movement of radon gas from the subsurface into the indoor air of buildings, is referred to as soil vapor intrusion. Sub-slab depressurization systems have been installed in the on-site buildings to prevent the indoor air quality from being affected by the contamination in soil vapor beneath the buildings. Environmental sampling indicated that soil vapor intrusion is not a concern for off-site buildings.

6.5: Summary of the Remediation Objectives

The objectives for the remedial program have been established through the remedy selection process stated in 6 NYCRR Part 375. The goal for the remedial program is to restore the site to pre-disposal conditions to the extent feasible. At a minimum, the remedy shall eliminate or mitigate all significant threats to public health and the environment presented by the contamination identified at the site through the proper application of scientific and engineering principles.

The remedial action objectives for this site are:

Soil Vapor

RAOs for Public Health Protection

- Mitigate impacts to public health resulting from existing, or the potential for, soil vapor intrusion into buildings at a site.

SECTION 7: SUMMARY OF SELECTED REMEDY

No Further Action

Based on the results of the investigations at the site, the IRM that has been performed, and the evaluation presented here, the Department is proposing No Further with continued operation of the Sub-slab Depressurization System and the implementation of ICs/ECs as the proposed remedy for the site. The Department believes that this remedy is protective of human health and the environment. The elements of the IRM already completed, and the institutional and engineering controls are listed below.

IRM

Mitigation measures, consisting of sub-slab depressurization systems, were installed and operational in July 2011 at both on-site building locations and at the off-site building immediately north of the site to address the potential for soil vapor intrusion to impact indoor air.

Green Remediation

Green remediation principals and techniques will be implemented to the extent feasible in the site management of the remedy as per DER-31. The major green remediation components are as follows;

- Considering the environmental impacts of treatment technologies and remedy stewardship over the long term;
- Reducing direct and indirect greenhouse gas and other emissions;
- Increasing energy efficiency and minimizing use of non-renewable energy;
- Conserving and efficiently managing resources and materials;
- Reducing waste, increasing recycling and increasing reuse of materials which would otherwise be considered a waste.

Institutional Control

Imposition of an institutional control in the form of an environmental easement for the controlled property that:

- 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);
- allows the use and development of the controlled property for commercial and industrial uses as defined by Part 375-1.8(g), although land use is subject to local zoning laws;
- restricts the use of groundwater as a source of potable or process water, without necessary water quality treatment as determined by the NYSDOH or County DOH;
- prohibits agriculture or vegetable gardens on the controlled property; and

- requires compliance with the Department approved Site Management Plan.

Site Management Plan

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 ensure the following institutional and/or engineering controls remain in place and effective:

Institutional Controls: The Environmental Easement discussed in the Institution Controls section above.

Engineering Controls: The Sub-slab Depressurization Systems discussed in the IRM section above.

This plan includes, but may not be limited to:

- o descriptions of the provisions of the environmental easement including any land use and groundwater restrictions;
 - o a provision for evaluation of the potential for soil vapor intrusion for any buildings developed on the site, including provision for implementing actions recommended to address exposures related to soil vapor intrusion;
 - o provisions for the management and inspection of the identified engineering controls;
 - o maintaining site access controls and Department notification; and
 - o 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 may not be limited to:
 - o a schedule of monitoring and frequency of submittals to the Department;
 - o monitoring for vapor intrusion for any buildings occupied or developed on the site, as may be required by the Institutional and Engineering Control Plan discussed in item a, above.

Exhibit A

Nature and Extent of Contamination

This section describes the findings of the Remedial Investigation for all environmental media that were evaluated. As described in Section 6.1, samples were collected from various environmental media to characterize the nature and extent of contamination.

For each medium, a table summarizes the findings of the investigation. The tables present the range of Volatile Organic Chemical (VOC) contamination found at the site in the media and compares the data with the applicable SCGs for the site. For comparison purposes, the SCGs are provided for each medium that allows for unrestricted use. For soil, if applicable, the Restricted Use SCGs identified in Section 6.1.1 are also presented.

Groundwater

Shallow groundwater shows only two chlorinated VOC compounds exceeding groundwater standards, i.e., cis 1,2-Dichloroethene up 24 ppb compared to a standard of 5 ppb, and Vinyl Chloride, up to 5.1 ppb compared to a standard of 2 ppb. Another VOC, toluene, was detected up to 840 ppb compared to a standard of 5 ppb.

Intermediate depth groundwater had fewer compounds detected that exceeded standards with the only detected VOC being 1,4-Dichlorobenzene found once at 7 ppb compared to a standard of 3 ppb while no contaminants exceeding standards were detected in deep groundwater.

Table 1A - Shallow Groundwater (16 – 20 ft bgs)

Detected Constituents	Concentration Range Detected (ppb) ^a	SCG ^b (ppb)	Frequency Exceeding SCG
VOCs			
Cis-1,2-Dichloroethene	ND to 24	5	6 of 14
Toluene	ND to 840	5	3 of 14
Vinyl Chloride	ND to 5.1	2	4 of 14

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), 6 NYCRR Part 703, Surface water and Groundwater Quality Standards, and Part 5 of the New York State Sanitary Code (10 NYCRR Part 5).

Table 1B - Intermediate Groundwater (20 – 76 ft bgs)

Detected Constituents	Concentration Range Detected (ppb) ^a	SCG ^b (ppb)	Frequency Exceeding SCG
VOCs			
1,4-Dichlorobenzene	ND to 7	3	1 of 71

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), 6 NYCRR Part 703, Surface water and Groundwater Quality Standards, and Part 5 of the New York State Sanitary Code (10 NYCRR Part 5).

No site-related groundwater contamination of concern was identified during the RI. Therefore, no remedial alternatives need to be evaluated for groundwater.

Soil

Surface and subsurface soil samples were collected at the site during the RI. Soil samples were collected from each groundwater screening location at the top of the water table, the bottom of borehole, and/or any depth interval(s) exhibiting notable odor, staining or elevated PID readings. The results indicate that soils at the site do not exceed the unrestricted SCG for VOCs.

Table 2 - Soil

Detected Constituents	Concentration Range Detected (ppm) ^a	Unrestricted SCG ^b (ppm)	Frequency Exceeding Unrestricted SCG	Restricted Use SCG ^c (ppm)	Frequency Exceeding Restricted SCG
VOCs					
Tetrachloroethene	ND to 0.055	1.3	0 of 38	150	0 of 38

a - ppm: parts per million, which is equivalent to milligrams per kilogram, mg/kg, in soil;

b - SCG: Part 375-6.8(a), Unrestricted Soil Cleanup Objectives.

c - SCG: Part 375-6.8(b), Restricted Use Soil Cleanup Objectives for the Protection of Public Health for Commercial Use, unless otherwise noted.

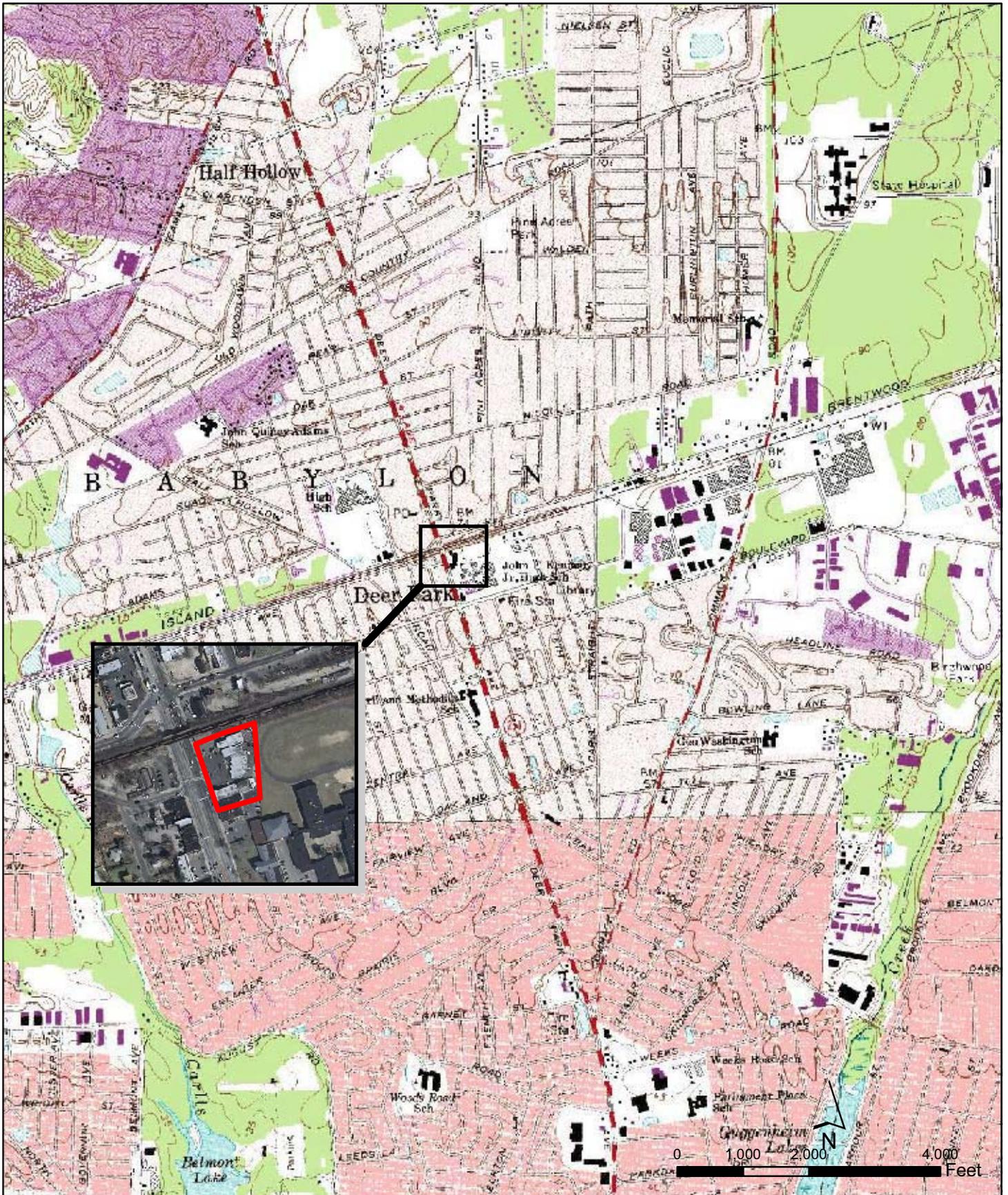
No site-related soil contamination of concern was identified during the RI. Therefore, no remedial alternatives need to be evaluated for soil.

Soil Vapor

The evaluation of 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 samples were collected from the sub-slab of structures located on the property and in one adjacent commercial property. Indoor air and outdoor air samples were also collected at this time. The samples were collected to assess the potential for soil vapor intrusion. The results indicate Tetrachloroethene and Trichloroethylene, which is a breakdown product of Tetrachloroethene was detected in the sub-slab vapor, however no indoor air concentrations were found.

Based on the concentrations detected, and in comparison with the NYSDOH Soil Vapor Intrusion Guidance, soil vapor contamination identified during the RI was addressed during the IRM described in Section 6.2.



Legend

 Site Boundary

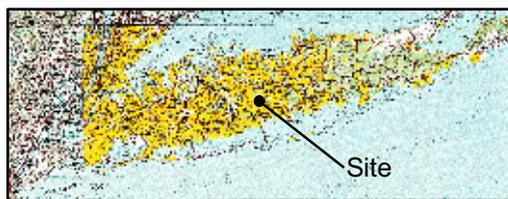


Figure 1
Site Location Map
Villa Dry Cleaners
Babylon, New York

APPENDIX A

Responsiveness Summary

RESPONSIVENESS SUMMARY

**Villa Cleaners
State Superfund Project
Deer Park, Suffolk County, New York
Site No. 152188**

The Proposed Remedial Action Plan (PRAP) for the Villa Cleaners site, was prepared by the New York State Department of Environmental Conservation (the Department) in consultation with the New York State Department of Health (NYSDOH) and was issued to the document repositories on March 1, 2011. The PRAP outlined the No Further Action proposal for the Villa Cleaners site.

The release of the PRAP was announced by sending a notice to the public contact list, informing the public of the opportunity to comment on the proposed remedy.

A public meeting was held on March 29, 2011, which included a presentation of the remedial investigation for the Villa Cleaners site as well as a discussion of the proposed actions. The meeting provided an opportunity for citizens to discuss their concerns, ask questions and comment on the proposed actions. These comments have become part of the Administrative Record for this site. The public comment period was to have ended on March 30, 2011, however, it was extended to April 15, 2011, at the request of the public.

This responsiveness summary responds to all questions and comments raised during the public comment period. The following are the comments received, with the Department's responses:

COMMENT 1: How was contamination at this site detected?

RESPONSE 1: Contamination was discovered in May of 1997 during a Suffolk County Department of Health Services inspection of the on-site leaching pools.

COMMENT 2: What was the time span from the site inspection to the time that New York State became involved in this site?

RESPONSE 2: Contamination was discovered in May of 1997 by the Suffolk County Department of Health Services (SCDHS). A response action was done, in October 1997, by the responsible party and overseen by the SCDHS. This preliminary response consisted of the removal of liquid and soil from the on-site leaching pools and a storm drain towards the rear (east) of the site. These features are still in use to date. The responsible party subsequently entered into the Department's Voluntary Cleanup Program in May 2002. This voluntary cleanup agreement was terminated in February 2004 and the site was then listed as a Class 2 site on the Registry of Inactive Hazardous Waste Disposal Sites subject to action under the State Superfund.

COMMENT 3: Does this site have a plume or is it just a small spot of contamination?

RESPONSE 3: The identified source areas were the on-site leaching pools, which were cleaned out removing the source of contamination. After the removal, a groundwater plume with contaminant concentrations exceeding the regulatory standard remained at the site. Over time, the concentrations in the groundwater have decreased such that there is no longer contamination detected above the cleanup objectives in site soils and no site-related groundwater contamination of concern was identified during the RI.

COMMENT 4: What is the size of the plume at this site?

RESPONSE 4: As stated in Response 3, no site-related groundwater contamination of concern remains at the site.

COMMENT 5: Where were the furthest down gradient groundwater monitoring wells put in?

RESPONSE 5: The permanent monitoring well that is furthest downgradient is located in the parking lot adjacent to the Crazy Billy's Liquor store. Groundwater samples have also been collected across the street from Crazy Billy's.

COMMENT 6: What happened to the plume if it is not there now?

RESPONSE 6: After the removal of the source of the contamination, the remaining site-related contamination in groundwater at or migrating from the site has been reduced by the natural processes of the aquifer. These processes include, among others, dilution as the plume mixed with other water in the aquifer.

COMMENT 7: How can I be sure that the plume is not underneath the school district's football fields or under the locations of the pools at the school district building?

RESPONSE 7: The groundwater in the area moves south-southwest, which is the opposite direction from the school. Contamination was not found upgradient of the site which is where the football fields are located.

COMMENT 8: How can I be sure that this site did not contaminate the school district's pools?

RESPONSE 8: The pools are filled from the municipal water lines, and this water is regularly tested by the local water district to ensure it meets safe drinking water standards.

COMMENT 9: Are the groundwater contamination levels at this point at the level that this part of the site can be a "closed case."

RESPONSE 9: The Department has selected the no further action remedy at this site because no contamination remains that needs to be remediated.

COMMENT 10: What were the guidelines for the disposal of perchloroethylene (PCE, perc) from 1965 – 1980?

RESPONSE 10: During these years, various Federal and State regulations broadly governed the storage, use, disposal and discharge of numerous solvents. On December 16, 1974, the Safe Drinking Water Act was passed into law which requires the states to regulate all direct injections of wastes to the subsurface. In November 1980, the Resource Conservation Recovery Act (RCRA) which regulates the generation, transportation, treatment and disposal of hazardous wastes was passed. As society became aware of the threats from certain chemicals, more comprehensive regulation of commercial and industrial processes were enacted.

COMMENT 11: What kind of guidelines are there on this chemical now?

RESPONSE 11: For dry cleaning facilities, Perc and Perc-contaminated washing solutions and drainings from the machine are handled as hazardous waste. In addition, there are air pollution control regulations applicable to all dry cleaning facilities in the state that use Perc. These regulations establish several regulatory strategies to reduce and contain the release of Perc and minimize the public's exposure to Perc.

COMMENT 12: What chemical is being used now in dry cleaning?

RESPONSE 12: Perc is still being used in commercial buildings; however, the risks of perc as a dry cleaning solvent have spurred interest in alternative solvents to replace its use. The Department has a list of these alternative dry cleaning solvents on its web site at <http://www.dec.ny.gov/chemical/8567.html>.

COMMENT 13: What is the protocol for using the new chemicals that are being used in dry cleaning today?

RESPONSE 13: Please see Response 12.

COMMENT 14: Are the sub-slab systems at Crazy Billy's and Villa Cleaners being used because of the contamination that is there now? How does it work?

RESPONSE 14: The source of the contamination has been removed. The only remaining issue is that of the remaining vapors trapped under the buildings. Sub-slab depressurization systems prevent the migration of soil vapor into the building by typically using a fan-powered vent and piping to draw vapors from the soil underneath the building's slab. These vapors are then typically discharged thru an exhaust system mounted on the side of the building to the atmosphere above the roof where they are quickly diluted.

COMMENT 15: What took so long to get this site cleaned up?

RESPONSE 15: Please see Response 2.

COMMENT 16: Why didn't we know about this site sooner?

RESPONSE 16: The Department strives to involve the public in the cleanup of sites as early as possible. In this case, the Department notified the public as soon as the responsible party entered into its VCP program in May 2002.

COMMENT 17: Would Villa Cleaners have to be torn down if the sub-slab system does not eliminate the problem?

RESPONSE 17: Sub-slab systems are successfully being used at many locations across the state to mitigate vapor intrusion and we expect it to work here. Based upon the track record for these mitigation systems, it is not expected that it would be necessary to tear down Villa Cleaners based on the remedy selected for this site.

COMMENT 18: Is there sufficient personnel at the state and at the local level to monitor the other dry cleaners in the area?

RESPONSE 18: Yes.

COMMENT 19: Will the Record of Decision (ROD) be posted on DEC's website?

RESPONSE 19: Yes. As part of our citizen participation activities, as well as the Department's effort to "go green" by using less paper, the ROD will be posted on Department's website.

APPENDIX B

Administrative Record

Administrative Record

**Villa Cleaners
State Superfund Project
Deer Park, Suffolk County, New York
Site No. 152188**

- Proposed Remedial Action Plan for the Villa Cleaners, dated February 2011, prepared by the Department
- Referral Memorandum, dated March 5, 2008, for the implementation of the Remedial Investigation (“RI”) including Interim Remedial Measures (“IRMs”) and development of the Feasibility Study (“FS”) for Villa Cleaners
- “Remedial Investigation/Feasibility Study Work Plan”, September 2008, prepared by Camp Dresser & McKee
- “Final Remedial Investigation Report”, April 2010, prepared by Camp Dresser & McKee
- “Sub-Slab Vapor Sampling Report”, April 2011, prepared by Environmental Assessment & Remediations
- “Layout Design - Vapor Mitigation System Installation”, June 2011, prepared by Alpine Services, Inc.
- “Report of Sub-Slab Depressurization Vapor Mitigation System Installation”, August 2011, prepared by Alpine Services, Inc.