Department of Environmental Conservation

Division of Environmental Remediation

Record of Decision

Former Munsey Cleaners Site
Operable Unit No. 1
Town of N. Hempstead, Nassau County, New York
Site Number 1-30-081

November 2005

New York State Department of Environmental Conservation
GEORGE E. PATAKI, *Governor* DENISE M. SHEEHAN, *Acting Commissioner*

DECLARATION STATEMENT - RECORD OF DECISION

Former Munsey Cleaners Inactive Hazardous Waste Disposal Site
Operable Unit No. 1
Town of N. Hempstead, Nassau County, New York
Site No. 1-30-081

Statement of Purpose and Basis

The Record of Decision (ROD) presents the selected remedy for Operable Unit (OU) 1 of the Former Munsey Cleaners site, a Class 2 inactive hazardous waste disposal site. The selected remedial program was chosen in accordance with the New York State Environmental Conservation Law 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 (NYSDEC) for OU1 of the Former Munsey Cleaners inactive hazardous waste disposal site, and the public's input to the Proposed Remedial Action Plan (PRAP) presented by the NYSDEC. A listing of the documents included as a part of the Administrative Record is included in Appendix B of the ROD.

Assessment of the Site

Actual or threatened release of hazardous waste constituents from this site have been addressed by implementing the interim remedial measures identified in this ROD. The removal of contaminated soil from the site and the continuous operation of the soil vapor extraction system and the sub-slab depressurization system has significantly reduced the threat to public health and the environment. Therefore, an operation, maintenance and groundwater monitoring program will be implemented to monitor the effectiveness of remedial actions implemented at the site.

Description of Selected Remedy

Based on the results of the Remedial Investigation conducted at the site and interim remedial measures completed at the site, the NYSDEC concludes that No Further Action is needed other than the Site Management Plan (SMP) which includes operation, maintenance and monitoring (OM&M) for the soil vapor extraction system (SVE) and sub-slab depressurization system listed below.

1. A SMP will be prepared to include the sampling schedule, maintenance of the systems, and reporting.

2. The SVE and sub-slab depressurization systems will be operated continuously and will be maintained on a periodic basis.

3. The indoor air sampling will be done on a quarterly basis for the first year, semi-annually thereafter. A minimum of one round annually will be collected during the heating season unless otherwise recommended by the NYSDEC. The groundwater will be sampled semi-

unless otherwise recommended by the NYSDEC. The groundwater will be sampled semi-annually for the first two years and annually thereafter unless otherwise recommended by the NYSDEC. Based on the results of the sampling events, the NYSDEC in conjunction with NYSDOH will determine the frequency of the sampling to be increased or decreased.

4. If it is determined from the review of the indoor air and groundwater sampling results that additional measures are required to improve the effectiveness of the systems, then the measures will be implemented. The measures may include the installation of additional extraction points for soil vapor in the areas of concern and/or the installation of new monitoring wells.

5. Imposition of an institutional control in the form of an environmental easement that will require compliance with the approved site management plan; restrict the use of groundwater as a source of potable water, without necessary water quality treatment as determined by NYSDOH; and require the property owner to complete and submit to the NYSDEC an institutional controls/engineering controls certification on a periodic basis.

6. The property owner will provide an institutional controls/engineering controls certification, prepared and submitted by a professional engineer or such other expert acceptable to the NYSDEC, on a periodic basis. This submittal will contain certification that the institutional controls and engineering controls, are still in place, allow the NYSDEC access to the site, and that nothing has occurred that will impair the ability of the control to protect public health or the environment, or constitute a violation or failure to comply with the site management plan.

7. The operation of the components of the remedy will continue until the remedial objectives have been achieved, or until the NYSDEC determines that continued operation is not needed because the remedial goals were achieved or the concentration of contaminants are asymptotic as referenced in Draft Technical Guidance Document, DER-10, Section 6.6.

New York State Department of Health Acceptance

The New York State Department of Health (NYSDOH) concurs that the remedy selected 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.

NOV 2 3 2005
Date

Dale A. Desnoyers, Director
Division of Environmental Remediation

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Former Munsey Cleaners Site
Operable Unit No. 1
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SECTION 1: SUMMARY OF THE RECORD OF DECISION

The New York State Department of Environmental Conservation (NYSDEC), in consultation with the New York State Department of Health (NYSDOH), is proposing a remedy for operable unit (OU) 1 of the Former Munsey Cleaners site. OU1 focuses on the contamination found inside the property boundary of the site. As more fully described in Sections 3 and 5 of this document, improper handling of dry cleaning waste resulted in the disposal of hazardous wastes, containing tetrachloroethene (PERC) and other volatile organics. These wastes contaminated the soil and groundwater at the site, and resulted in:

- a significant threat to human health associated with exposures to contaminated soil and contaminants in indoor air.

- a significant environmental threat due to PERC impacting groundwater.

During the course of the investigation certain actions, known as interim remedial measures (IRMs), were undertaken at the Former Munsey Cleaners site in response to the threats identified above. 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/feasibility study (RI/FS). The IRMs undertaken at this site included the removal of 30 tons of contaminated soil from the basement in 1997, installation of a soil vapor extraction (SVE) system to address the residual soil contamination in 1997, and installation of a positive pressure ventilation system in October 2000 to address the indoor air contamination. To further improve the quality of indoor air, a sub-slab de-pressurization system was installed in November 2004.

Based on the implementation of the above IRMs, the findings of the investigation of this site indicate that OU1no longer poses a significant threat to human health or the environment. Therefore, No Further Action with continued operation of the SVE system and the sub-slab system is proposed as the remedy for OU1 of this site. Based on a review of the monitoring data and completion of future remedial efforts at OU2, a determination will be made whether to reclassify the site to a Class 4 site on the New York State Registry of Inactive Hazardous Waste Disposal sites. Class 4 means that a site has been properly closed, but that requires continued operation, maintenance and/or monitoring.

SECTION 2: SITE LOCATION AND DESCRIPTION

The site is located in an urban portion of the Town of North Hempstead, Nassau County, NY. The site is approximately 5 miles north of the Long Island Expressway. Refer to Figure 1 for the site location. The site is at the intersection of Port Washington Boulevard and Main Street in a one-story retail shopping plaza. The site occupies approximately 4,200 square feet at the north end of the shopping complex. The first floor of the site is currently occupied by a Real Estate company and the basement is vacant. Refer to Figure 4 for the site plan. The Plaza Cleaners site is located across from this site on Port Washington Boulevard.

OU1, which is the subject of this document, consists of a building located in a shopping complex where the dry cleaning operations were conducted. An operable unit represents a portion of the site remedy that for technical or administrative reasons can be addressed separately to eliminate or mitigate a release, threat of release or exposure pathway resulting from the site contamination.

The remaining operable unit OU 2, for this site is off-site groundwater. The off-site groundwater plume extends north west from the site to Ohio Avenue and potentially beyond. Additional investigations will be conducted to determine the nature and extent of off-site groundwater contamination.

SECTION 3: SITE HISTORY

3.1: Operational/Disposal History

The site is a commercial building constructed in 1947 and was used for dry cleaning operations until 1994. Tetrachloroethene (PERC) was used during dry cleaning operations. Spent solvents appear to have been disposed of in the basement. A soil sample taken by the NYSDEC from a basement sump during the summer of 1994 revealed contamination by the dry cleaning solvent tetrachloroethene. A follow-up site inspection and sampling visit by the Nassau County Department of Health confirmed the disposal of a consequential quantity of hazardous waste. Samples from the dirt floor from the basement, floor drain and the sump were found to contain tetrachloroethene as high as 2,200 parts per million (ppm).

3.2: Remedial History

In 1995, the NYSDEC first listed the site as a Class 2a site in the Registry of Inactive Hazardous Waste Disposal Sites in New York (the Registry). Class 2a is a temporary classification assigned to a site that has inadequate and/or insufficient data for inclusion in any of the other classifications. In 1997, the NYSDEC listed the site as a Class 2 site in the Registry. A Class 2 site is a site where hazardous waste presents a significant threat to the public health or the environment and action is required.

A Preliminary Site Assessment (PSA) was implemented at the site in 1996. The field work involved sampling the soil in the basement and analyzing the groundwater. Based on the results from the PSA an Interim Remedial Measure (IRM) was conducted at the site in 1996. The IRM involved the removal of approximately 30 tons of contaminated soil from the basement area. A soil vapor extraction (SVE) system was installed in the basement to remove the

remaining shallow soil contamination in the basement under this IRM. The SVE system was operated continuously until July 1998 when the final verification soil samples obtained from the basement indicated that the contamination from the shallow soil had been reduced to standards, criteria and guidance (SCGs) levels. Refer to Table 1 for the project time-line.

SECTION 4: 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 NYSDEC and the Montfort Trusts, the PRP for the site, entered into a Consent Order in March 1996 to perform the PSA and the IRM. A second order was signed on October 7, 2000 to perform the Phase I Remedial Investigation. The second order was amended on May 7, 2002 to implement the Phase II Remedial Investigation/ Feasibility Study. After the remedy is selected, the NYSDEC will approach the PRPs to implement the selected remedy under an Order on Consent.

SECTION 5: SITE CONTAMINATION

A remedial investigation/feasibility study (RI/FS) has been conducted to evaluate the alternatives for addressing the significant threats to human health and the environment.

5.1: Summary of the Remedial Investigation

The purpose of the RI was to define the nature and extent of any contamination resulting from previous activities at the site. The Phase I RI was conducted between October 2000 and June 2001. The Phase II RI was conducted between August 2002 and June 2003. The field activities and findings of the investigation are described in the Phase I and II RI reports.

The following activities were conducted during the RI:

- Installation of approximately fifteen (15) soil borings and six (6) monitoring wells for analysis of soils and groundwater as well as physical properties of soil and hydrogeologic conditions;

- Sampling of six (6) new and four (4) existing monitoring wells;

- Collection of approximately ten (10) sub-slab vapor samples. Collection of thirteen rounds of approximately six (6) indoor air samples since August 2000.

Refer to Figures 2, 3 and 4 for sample locations.

To determine whether the soil, groundwater, and indoor air contain contamination at levels of concern, data from the investigation were compared to the following SCGs:

- Groundwater, drinking water, and surface water SCGs are based on NYSDEC "Ambient Water Quality Standards and Guidance Values" and the Part 5 Drinking Water Standards of the New York State Sanitary Code.

- Soil SCGs are based on the NYSDEC "Technical and Administrative Guidance Memorandum (TAGM) 4046; Determination of Soil Cleanup Objectives and Cleanup Levels".

- Concentrations of PCE in air were evaluated using the NYSDOH draft "Guidance for Evaluating Soil Vapor Intrusion in the State of New York", dated February 2005.

Based on the RI results, in comparison to the SCGs and potential public health and environmental exposure routes, certain media and areas of the site required remediation. These are summarized below. More complete information can be found in the RI report.

5.1.1: Site Geology and Hydrogeology

The site is situated at an elevation of approximately 125-feet above mean sea level in the Town of North Hempstead in northern Nassau County, Long Island on Manhasset Neck. Manhasset Neck is a 13.4 square mile peninsula that is bounded on the west, north and east by Manhasset Harbor, Long Island Sound and Hempstead Harbor. Regional topography irregularly slopes towards these bodies of water from the higher inland areas, but gently slopes away from the site to the west and more steeply upward from the site to the east. Surface run-off is controlled by gently sloping pavement towards on-site storm drains.

The local potable water supply is the underlying groundwater, which is supplied by the Port Washington Water District. Most active public supply wells extract water from deeper aquifers below silt and clay units. There are no existing drinking water supply wells at the site, nor is groundwater used for any purpose at the site. Public water supply wells exist approximately 3000 feet downgradient of the site, but have not been impacted to-date.

Based on the information obtained from the RI, the groundwater table is located approximately twenty (20) feet below the ground surface at the site. The direction of the groundwater is found to be toward the northwest from the site.

5.1.2: Nature of Contamination

As described in the RI report, many soil, groundwater and indoor air samples were collected to characterize the nature and extent of contamination. The main categories of contaminants that exceed their SCGs are volatile organic compounds (VOCs).

The primary contaminant of concern at the site is PERC, a volatile organic compound, that was used at the site for dry cleaning operations. The other VOCs found at the site include trichloroethene, and other breakdown products of PERC.

5.1.3: Extent of Contamination

This section describes the findings of the investigation for all environmental media that were investigated.

Chemical concentrations are reported in parts per billion (ppb) for water, parts per million (ppm) for soil, and micrograms per cubic meter ($\mu g/m^3$) for air samples. For comparison purposes, where applicable, SCGs are provided for each medium.

Tables included in the following sections summarizes the degree of contamination for the contaminants of concern in soil, groundwater and indoor air and compares the data with the SCGs for the site. The following are the media which were investigated and a summary of the findings of the investigation.

Subsurface Soil

Prior to the IRM, the soil samples obtained during the PSA from the floor of the basement at the site showed significant concentrations of PERC. The highest concentration of 12,000 ppm was detected in the sample obtained from the floor drain. After the completion of the 1996 IRM, the soil samples obtained from the basement did not show contamination above 1.4 ppm, which is the SCG for PERC. Figure 5 shows the location of soil samples obtained during the PSA. Table 2 includes data for the samples obtained prior to and after the implementation of the PSA.

During the RI several soil borings were installed within and adjacent to the site building to locate previously unidentified source areas. The results from these samples showed PERC concentration in soil below the SCG level except for one sample. This sample was obtained from the floor drain and had a concentration of PERC at 1.83 ppm which is a marginal exceedance of the SCG level for PERC. Table 3 includes the samples obtained during the Phase I and II RI.

Groundwater

During the PSA, four groundwater samples were obtained and analyzed. The results indicated that the groundwater is contaminated with PERC above the groundwater standard.

During the 2001 Phase I RI, six new monitoring wells were installed at the site and off-site. The new monitoring wells and the existing wells at the Mobil Gas sation located across from the site were sampled in 2000 and 2001. The results obtained from the RI were consistent with the results obtained during the PSA. The off-site wells located at the Mobil property showed a significant drop in the concentration of PERC. This was attributed to the soil removal and operation of the SVE system as part of the 1996 IRM.

As part of the on-going investigation at the site groundwater samples were obtained in April 2004, October 2004 and January 2005. The results from these sampling events showed a significant decrease in the concentration of PERC except for the most downgradient well MC-3.

The decrease in PERC concentration is attributable to the operation of the SVE system at the site. Refer to Table 4 which includes all the groundwater results. Since there are other sites in this area that may have contributed contamination to the off-site groundwater plume, the site has been separated into two operable units to address the on-site and off-site groundwater. This will facilitate the remediation of the on-site soil and groundwater and achieve the remedial goals in a reasonable amount of time. Possible contributors to the off-site groundwater contamination (OU2) plume are believed to be from this site, the Plaza Cleaners site and the nearby Mobil gas station. There are no records to indicate that any spills occurred the Mobil gas station. Additional testing of the groundwater will be conducted to determine whether the Mobil Gas station contributed to off-site groundwater contamination. The off-site groundwater contamination will be addressed under OU2. A remedy for the off-site groundwater contamination will be selected after the completion of the off-site investigation.

Sub-Slab Vapor/Indoor Air

A soil vapor survey was conducted in August 2002 at the site and samples were obtained from selected locations (Figure 6). The results indicated elevated concentrations of PERC ranging from 59,600 to 201,000 $\mu g/m^3$. Since August 2000, thirteen rounds of indoor air sampling were conducted at the site. The concentration of PERC in indoor air has progressively declined because of the implementation of IRMs discussed in detail in Section 5.2. The results from the last indoor air sampling event conducted in January 2005 shows PERC at low levels but still exceeding the NYSDOH draft "Guidance for Evaluating Soil Vapor Intrusion in the State of New York". Table 5 includes the results of all the indoor air sampling events.

5.2: 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 completion of the RI/FS.

An IRM was conducted at the site in 1996 that involved the removal of approximately 30 tons of contaminated soil from the basement area. A soil vapor extraction (SVE) system was installed in the basement to remove remaining shallow soil contamination in the basement under this IRM.

Mitigation measures were taken in the basement of the site to address potential human exposures (via inhalation) to volatile organic compounds associated with soil vapor intrusion. A positive pressure ventilation system was installed in the basement on October 24, 2000 to address the elevated levels of PERC in indoor air. The results of indoor air samples obtained after the installation and operation of the system indicated a significant decrease in the PERC concentration in indoor air at the site.

To further improve the quality of the indoor air at the site, the NYSDEC requested the responsible party to re-start the existing SVE system at the site. The SVE system was re-started on July 15, 2003 and was operated continuously until November 9, 2004. The positive pressure ventilation system was turned off. The results of the indoor air samples showed that the SVE system effectively reduced the PERC concentration in indoor air at the site.

To remove the residual contamination in indoor air, the NYSDEC asked the consultant to design and install a sub-slab de-pressurization system that would be operated permanently at the site. The sub-slab system was installed at the site on November 10, 2004. The SVE system was turned off to determine the effectiveness of the sub-slab depressurization system. The results of the indoor air samples obtained in January 2005 show the concentration of PERC in indoor air is significantly reduced but is still above the NYSDOH draft "Guidance for Evaluating Soil Vapor Intrusion in the State of New York". Since the sub-slab depressurization system is performing satisfactorily, on May 12, 2005, the SVE system was restarted. The SVE system is expected to bring down the concentration of contaminants in groundwater and indoor air.

5.3: Summary of Human Exposure Pathways:

This section describes the types of human exposures that may present health risks to persons at or around the site.

An exposure pathway describes the means by which an individual may be exposed to contaminants originating from a site. An exposure pathway has five elements: [1] a contaminant source, [2] contaminant release and transport mechanisms, [3] a point of exposure, [4] a route of exposure, and [5] a receptor population.

The source of contamination is the location where contaminants were released to the environment (any waste disposal area or point of discharge). Contaminant release and transport mechanisms carry contaminants from the source to a point where people may be exposed. The exposure point is a location where actual or potential human contact with a contaminated medium may occur. The route of exposure is the manner in which a contaminant actually enters or contacts the body (e.g., ingestion, inhalation, or direct contact). The receptor population is the people who are, or may be, exposed to contaminants at a point of exposure.

An exposure pathway is complete when all five elements of an exposure pathway exist. An exposure pathway is considered a potential pathway when one or more of the elements currently does not exist, but could in the future.

A potential for exposure to contaminated soils existed in the past, within the Former Munsey Cleaners basement. However, this potential exposure route was removed in 1996 upon completion of the soil removal IRM.

On-site groundwater is not used for potable or other uses, making this an incomplete exposure pathway for OU1. As discussed previously, off-site groundwater will be addressed as a separate operable unit.

Indoor air has been impacted by site related contaminants, specifically PERC. Initially, levels of PERC exceeded the NYSDOH guideline for PERC in the basement of the shopping plaza. Levels within the occupied portions of the plaza were above typical background concentrations, but below the guideline. A series of IRMs have been implemented at the site to reduce concentrations of PERC within the shopping plaza, with a goal of obtaining background levels. As a result, concentrations in indoor air have been significantly reduced and levels on the

first floor are near background concentrations. It is anticipated that the November 2004 sub-slab depressurization system will remain effective and minimize the potential for exposures to PERC in indoor air.

5.4: Summary of Environmental Impacts

This section summarizes the existing and potential future environmental impacts presented by the site prior to the IRM. Environmental impacts include existing and potential future exposure pathways to fish and wildlife receptors, as well as damage to natural resources such as aquifers and wetlands.

Site contamination has impacted the groundwater resource in the upper aquifer at the site. Based on the data obtained from the RI, the groundwater contamination concentrations have decreased but are still above the groundwater standards. The decline in groundwater contamination on-site is attributable to the soil excavation and operation of the SVE system at the site.

SECTION 6: SUMMARY OF THE REMEDIATION GOALS AND THE SELECTED REMEDY

Goals for the remedial program have been established through the remedy selection process stated in 6 NYCRR Part 375-1.10. At a minimum, the remedy selected must eliminate or mitigate all significant threats to public health and/or the environment presented by the hazardous waste disposed at the site through the proper application of scientific and engineering principles.

Prior to the completion of the IRM described in Section 5.2, the remediation goals for this site were to eliminate or reduce to the extent practicable:

- exposures of persons at or around the site to PERC in soil;
- the release of contaminants from soil into groundwater that may create exceedances of groundwater quality standards;
- the release of contaminants from subsurface soil under the basement into indoor air through soil vapor; and
- exposures to contaminants in indoor air due to soil vapor intrusion.

The NYSDEC believes that the IRMs have accomplished these remediation goals provided that the SVE and sub-slab systems continue to be operated and maintained in a manner consistent with the design.

The main SCGs applicable to this project are as follows:

- ambient groundwater quality standards,

- NYSDEC TAGM 4046 for the Determination of Soil Cleanup objectives and Cleanup Levels and

- The NYSDOH draft "Guidance for Evaluating Soil Vapor Intrusion in the State of New York", dated February 2005.

The following completed elements of the IRM have achieved the soil remediation goals, and are in the process of achieving the groundwater and indoor air goals to satisfy SCGs for the site:

1. The 1996 IRM has removed the contaminated soil from the basement thereby preventing the migration of contaminants from soil into the groundwater.

2. The installation of the SVE system in the basement has removed the residual contamination in soil. The subsurface soil sampling conducted during the RI showed that the PERC found in soil samples is below the SCGs.

3. The installation of the positive pressure ventilation system in October 2000 has significantly reduced the concentration of PERC in indoor air.

4. The existing SVE system was re-started in July 2003 and operated continuously until November 2004. This further reduced the PERC concentration in indoor air. The SVE system was re-started on May 12, 2005.

5. A sub-slab depressurization system was installed at the site in November 2004. The results of the indoor air samples obtained in January 2005 shows the concentration of PERC at low levels in indoor air but still above background level.

6. The SVE system was turned off in November 2004 to determine the effectiveness of the sub-slab depressurization system. Since the sub-slab depressurization system is performing satisfactorily, on May 12, 2005, the SVE system was restarted.

7. The soil removal and operation of the SVE system has reduced the contaminant levels in groundwater.

Based on the results of the investigation at the site, the IRMs that have been performed, and the evaluation presented here, the NYSDEC is selecting No Further Action with continued operation of the SVE and sub-slab systems as the preferred alternative for the site. The operation, maintenance, and monitoring plan of the site will be continued. Reclassification of the site from a Class 2 to a Class 4 on the New York State Registry will be considered after completion of future remedial efforts of OU2. A Class 4 site means the site is properly closed but requires continued management.

The basis for this proposal is the NYSDEC's conclusion that No Further Action with continued operation of the SVE and sub-slab systems will be protective of human health and the

environment and will satisfy all SCGs, as described above. Overall protectiveness is achieved through meeting the remediation goals listed above.

Therefore, the NYSDEC concludes that No Further Action is needed other than the Site Management Plan (SMP) to include operation, maintenance and monitoring (OM&M) for the SVE and sub-slab depressurization systems listed below.

1. A SMP that includes an OM&M plan will be prepared and submitted. The plan will include the sampling schedule, maintenance of the systems, and reporting.

2. The SVE and sub-slab depressurization systems will be operated continuously and will be maintained on a periodic basis.

3. The indoor air sampling will be done on a quarterly basis for the first year, semi-annually thereafter. A minimum of one round annually will be collected during the heating season unless otherwise provided by the NYSDEC. The groundwater will be sampled semi-annually for the first two years and annually thereafter unless otherwise provided by the NYSDEC. Based on the results of the sampling events, the NYSDEC in conjunction with NYSDOH will determine the frequency of the sampling to be increased or decreased.

4. If it is determined from the review of the indoor air and groundwater sampling results that additional measures are required to improve the effectiveness of the systems, then additional measures will be implemented. The measures may include the installation of additional extraction points for soil vapor in the areas of concern and/or the installation of new monitoring wells.

5. Imposition of an institutional control in the form of an environmental easement that will require compliance with the approved site management plan; restrict the use of groundwater as a source of potable water, without necessary water quality treatment as determined by NYSDOH; and require the property owner to complete and submit to the NYSDEC an institutional controls/engineering controls certification on a periodic basis.

6. The property owner will provide an institutional controls/engineering controls certification, prepared and submitted by a professional engineer or such other expert acceptable to the NYSDEC, on a periodic basis. This submittal will contain certification that the institutional controls and engineering controls, are still in place, allow the NYSDEC access to the site, and that nothing has occurred that will impair the ability of the control to protect public health or the environment, or constitute a violation or failure to comply with the site management plan.

7. The operation of the components of the remedy will continue until the remedial objectives have been achieved, or until the NYSDEC determines that continued operation is not needed because the remedial goals were achieved or the concentration of contaminants are asymptotic as referenced in Draft Technical Guidance Document, DER-10, Section 6.6.

Table 1
Munsey Cleaners Site
Site No. 150081
PROJECT TIME-LINE

1947	A commercial building was constructed at the site.
1994	The site was used for dry cleaning operations until 1994.
1994	A soil sample taken by the NYSDEC from a basement sump during the summer of 1994 revealed contamination by the dry cleaning solvent tetrachloroethene.
1995	NYSDEC first listed the site as a Class 2a site in the Registry of Inactive Hazardous Waste Disposal Sites in New York (the Registry). Class 2a is a temporary classification assigned to a site that has inadequate and/or insufficient data for inclusion in any of the other classifications.
1996	A Preliminary Site Assessment (PSA) was implemented at the site.
1996	Based on the results from the PSA an Interim Remedial Measure (IRM) was conducted at the site in 1996. The IRM involved the removal of approximately 30 tons of contaminated soil from the basement area. A soil vapor extraction (SVE) system was installed in the basement to remove remaining shallow soil contamination in the basement under this IRM.
1997	NYSDEC listed the site as a Class 2 site in the Registry. A Class 2 site is a site where hazardous waste presents a significant threat to the public health or the environment and action is required.
July 1998	The operation of the SVE system was discontinued based on the final verification soil samples obtained from the basement.
Aug. 17, 00	Initial round of indoor air samples was conducted.
Oct. 2000	The Phase I RI was conducted between October 2000 and June 2001.
Oct. 24, 00	As part of the on-going investigations at the site, a positive pressure ventilation system was installed in the basement to reduce levels of tetrachloroethene (PERC) in indoor air. The results of the indoor air samples obtained after the installation and continuous operation of the system indicated a significant decrease in PERC concentration in indoor air at the site.
Aug. 2002	The Phase II RI was conducted between August 2002 and June 2003.
July 15, 03	At the request of the NYSDEC and NYSDOH, the SVE was re-started on July 15, 2003 to further improve the indoor air quality at the site. The SVE system was

operated continuously until November 9, 2004. The positive pressure ventilation system was turned off. The results of the indoor air samples showed that the SVE system effectively reduced the PERC concentration in indoor air at the site.

October 2003 The consultant submitted a draft feasibility study report in October 2003. The report evaluated different remedial alternatives to address the indoor air and groundwater contamination at the site. Prior to revising the report based on the comments submitted by the NYSDEC, the consultant was asked to sample and analyze the groundwater to assess the current groundwater quality.

April 2004 The previous groundwater sampling was done in June 2001. On April 2004, a new round of groundwater samples was obtained and analyzed. The results indicated a significant decrease in groundwater contaminants concentration.

October 2004 To confirm the groundwater results obtained from the April 2004 sampling event, another round of groundwater sampling was done in October 2004 and the results from this sampling event were consistent with the April 2004 sampling.

Nov.10, 2004 The NYSDEC asked the consultant to design and install a sub-slab de-pressurization system that will remove the residual contamination in indoor air and would be operated permanently at the site. The sub-slab system was designed and installed at the site on November 10, 2004. The SVE system was turned off.

TABLE 2
Preliminary Site Assessment (PSA)
Sampling date - June 1996 (pre-1996 IRM sampling)

SUBSURFACE SOIL	Contaminants of Concern	Concentration Range Detected (ppm)[a]	SCG[b] (ppm)[a]	Frequency of Exceeding SCG
Volatile Organic Compounds (VOCs)	tetrachloroethene	ND - 12,000	1.4	6 of 15
	trichloroethene	ND - 25	0.7	3 of 15
	methylene chloride	ND - 3.4	0.1	4 of 15

GROUNDWATER	Contaminants of Concern	Concentration Range Detected (ppb)[a]	SCG[b] (ppb)[a]	Frequency of Exceeding SCG
Volatile Organic Compounds (VOCs)	tetrachloroethene	43 - 1900	5	4 of 4
	trichloroethene	ND - 60	5	3 of 4
	trans-1,2-dichloroethene	ND - 2.1	5	0 of 4
	Vinyl chloride	ND	2	0 of 4

Sampling date - June 1996 (post-1996 IRM sampling)

SUBSURFACE SOIL	Contaminants of Concern	Concentration Range Detected (ppm)[a]	SCG[b] (ppm)[a]	Frequency of Exceeding SCG
Volatile Organic Compounds (VOCs)	**tetrachloroethene**	**0.0041 - 0.005**	**1.4**	**0 of 4**
	trichloroethene	**ND**	**0.7**	**0 of 4**
	methylene chloride	**ND**	**0.1**	**0 of 4**

[a] ppb = parts per billion, which is equivalent to micrograms per liter, ug/L, in water;
ppm = parts per million, which is equivalent to milligrams per kilogram, mg/kg, in soil;

[b] SCG = standards, criteria, and guidance values;

TABLE 3
Phase I RI (off-site sampling)
Sampling Date - January 2001

SUBSURFACE SOIL	Contaminants of Concern	Concentration Range Detected (ppm)[a]	SCG[b] (ppm)[a]	Frequency of Exceeding SCG
Volatile Organic Compounds (VOCs)	tetrachloroethene	ND - 0.028	1.4	0 of 13
	trichloroethene	ND	0.7	0 of 13
	methylene chloride	ND	0.1	0 of 13
	cis-1,2-dichloroethene	ND	NA	
	Vinyl Chloride	ND	0.2	0 of 13

Phase II RI (on-site sampling)
Sampling Date - October 2002

SUBSURFACE SOIL	Contaminants of Concern	Concentration Range Detected (ppm)[a]	SCG[b] (ppm)[a]	Frequency of Exceeding SCG
Volatile Organic Compounds (VOCs)	tetrachloroethene	0.185 - 1.8	1.4	1 of 8
	trichloroethene	ND	0.7	0 of 8
	methylene chloride	ND	0.1	0 of 8
	cis-1,2-dichloroethene	ND	NA	
	Vinyl Chloride	ND	0.2	0 of 8

[a] ppb = parts per billion, which is equivalent to micrograms per liter, ug/L, in water;
ppm = parts per million, which is equivalent to milligrams per kilogram, mg/kg, in soil;

[b] SCG = standards, criteria, and guidance values;

TABLE 4

Munsey Cleaners Site, 1-30-081

Groundwater Sample Results **ALL RESULTS IN ppb (ug/L)**

Parameters	MC-1S					MC-1I					MC-1D				
	Nov. 00	06/01	04/04	10/04	01/05	Nov. 00	06/01	04/04	10/04	01/05	Nov. 00	06/01	04/04	10/04	01/05
PCE	698	1190	109	99.5	154	14.1	350	47.7	9.5	102	353	61.4	69.7	45.4	18.4
TCE	ND	ND	ND	ND	0.64	ND	ND	ND	ND	0.35	ND	ND	ND	ND	0.47
cis-1,2-Di	102	19.8	ND	ND	0.9	ND	ND	ND	ND	0.56	ND	ND	ND	ND	ND
Vinyl Cl.	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methy. Cl.	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Parameters	MC-2					MC-3					MC-4				
	Nov. 00	06/01	04/04	10/04	01/05	Nov. 00	06/01	04/04	12/04	01/05	Nov. 00	06/01	04/04	10/04	01/05
PCE	1300	461	185	NA	NA	418	394	159	434	364	ND	ND	ND	ND	2.9
TCE	ND	ND	ND	NA	NA	ND	ND	5.8	11	8.7	ND	ND	ND	ND	ND
cis-1,2-Di	ND	ND	ND	NA	NA	20.1	ND	10.9	23.2	18.4	ND	ND	ND	ND	ND
Vinyl Cl.	ND	ND	ND	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methy. Cl.	ND	ND	ND	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Parameters	MW-1					MW-2					MW-4				
	Nov. 00	06/01	04/04			Nov. 00	06/01	04/04			Nov. 00	06/01	04/04		
PCE	226	40	65.3			6.4	219	283			155	79	108		
TCE	ND	ND	ND			ND	36.6	19.7			ND	ND	ND		
cis-1,2-Di	11.4	9	ND			148	249	210			26.9	10.7	8		
Vinyl Cl.	ND	ND	ND			10.6	ND	ND			ND	ND	ND		
Methy. Cl.	ND	ND	ND			ND	ND	ND			ND	ND	ND		

Parameters	SCG
PCE	5
TCE	5
cis-1,2-Di	5
Vinyl Cl.	0.3
Methy. Cl.	5

PCE - Tetrachloroethene
TCE - Trichloroethene
cis-1,2-Di - cis-1,2-Dicholoroethene
Vinyl Cl. - Vinyl chloride
Methyl. Cl. - Methylene Chloride

TABLE 5

Munsey Cleaners Site, Site No. 1-30-081

Indoor Air Monitoring Results

	Tetrachloroethene Concentration / Duplicate (ug/m^3)												
Location	**8/17/2000**	**10/10/2000**	**11/14/2000**	**5/23/2001**	**9/5/2001**	**4/29/2002**	**8/15/2002**	**7/14/2003**	**9/18/2003**	**12/15/2003**	**5/10/2004**	**10/20/2004**	**1/13/2005**
F. Munsey Cleaners - First Floor (pizza oven door)	40/50	60	29	13	63/66								
F. Munsey Cleaners - First Floor (kitchen)					63			8	66	18/18	12	24	7.6
F. Munsey Cleaners -Basement Dry Store Room	100/100		37	46	75/77	28		18	14	27/30	22	42	9.7
F. Munsey Cleaners - NW Basement Room	400				62	20							
F. Munsey Cleaners - second NW Room sample	260												
F. Munsey Cleaners - NE Basement Room	420	270			260	110							
F. Munsey Cleaners - SW Basement Room	260/250		46	67	96		80		68	30/38	22	49	37
F. Munsey Cleaners - SE Basement Room	410				180			130	90	40/NS	27	57	62
Basement Hallway	110	80	37	56	110	43							
Dance Studio Upstairs		90	56	60	54/57	60	26	20/20	62	25/23	24	42	7.8
Dance Studio Basement #1		160	82/78	88/98	130	94/87	50	20	51	28/46	16	46	9.5
Dance Studio Basement #2		180		104/104			50						
Daniel Gale Associates - Upstairs		60											
Daniel Gale Associates - Basement		70											
Campus Deli - Upstairs		80											
Campus Deli Basement		90											
Port Washington Cyclery - Upstairs		40									4.8		
Port Washington Cyclery - Basement		80									10		
Saint Honore Pastry Shop - Upstairs		50											
Saint Honore Pastry Shop - Basement		60											
Genovese - Upstairs		20											
Genovese - Basement		90											
Tanning Salon											35		
Tanning Salon Basement											27		
North Shore Wireless - Outside											7.6		
North Shore Wireless - Upstairs		30								94/NS	22		
North Shore Wireless - Basement		50								40/NS	19		
New Munsey Cleaners - Basement #1		720											
New Munsey Cleaners - Basement #2		710									219		
New Munsey Cleaners - Upstairs		960									797		
Outdoor Sample		5		5	5	5*		5*	1	13/12	5	3.3	4.8

Blank - Not Sampled

**All samples were collected using passive organic vapor monitoring badges

ug/m^3 - micrograms per cubic meter

* tetrachloroethene detected, but at a concentration too low (below 5) for the instrument to quantify

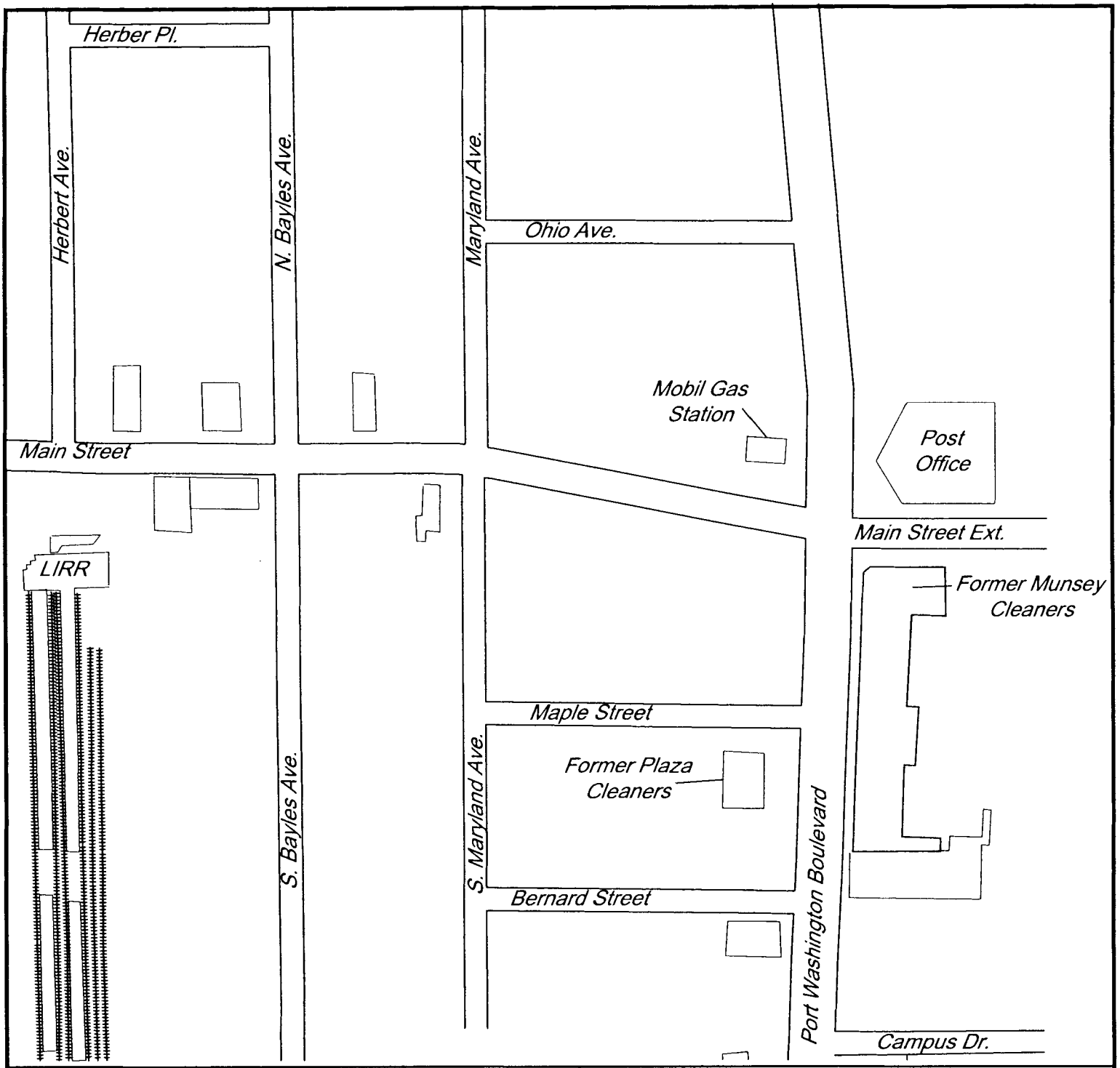
Dec. 2003 - 30/38 refers to the sample results of the consultant (30)/sample results of the NYSDOH (38)

Dec. 2003 - NS refers to Not Sampled

SCGs for Indoor Air:

SCG = standards, criteria, and guidance values; Indoor Air: The NYSDOH's October 1997 Tetrachloroethene Ambient Air Criteria Document, which provides the basis for the 100 µg/m3 guideline. The NYSDOH "Tetrachloroethene in Indoor and Outdoor Air" fact sheet states, "Reasonable and practical actions should be taken to reduce PERC exposure when indoor air levels are above background, even when they are below the guideline of 100 µg/m3. The goal of the recommended actions is to reduce PERC levels in indoor air to as close to background as practical."

Laurel Environmental Associates, LTD	**Laurel Environmental Associates, Ltd.**	**FIGURE 1**
	52 Elm Street Huntington, NY 11743 631-673-0612	Location Map with Down Gradient Public Supply Wells
		Scale: As Shown
	Drawn By: SAY 04/27/05	Former Munsey Cleaners Port Washington, New York



0 100 200 300

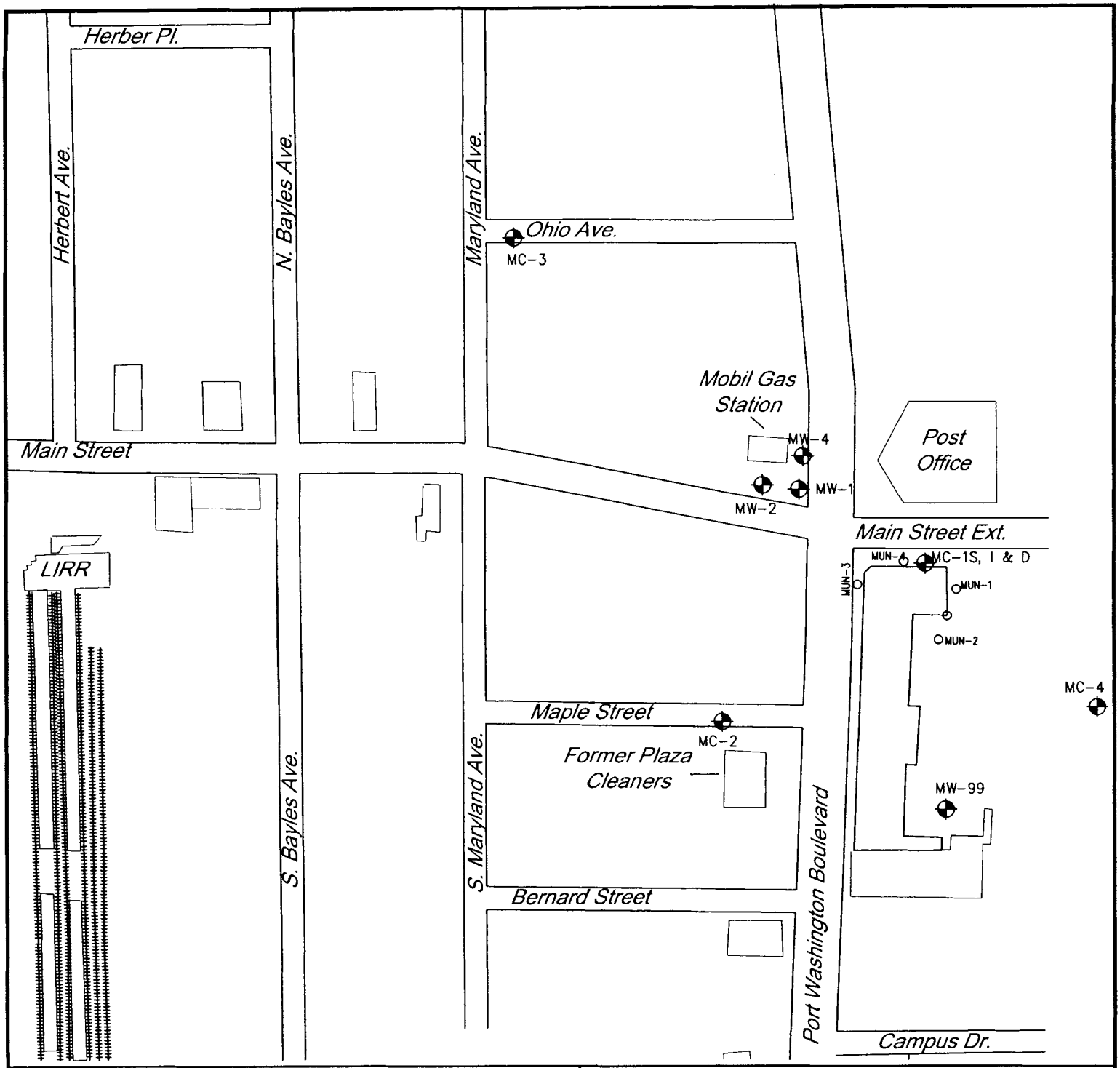
Scale in Feet

N

CA RICH CONSULTANTS, INC.

Certified Ground-Water and Environmental Specialists
17 Dupont Street, Plainview, New York 11803

TITLE: Site Plan		DATE: 12/10/01
		SCALE: As Shown
FIGURE: 2	Former Munsey Cleaners Site Port Washington, New York	DRAWN BY: I.H.O
DRAWING NO: 1123-1A		APPR. BY: E.A.W.



0 100 200 300

Scale in Feet

MW-2 EXISTING MONITORING WELL

MC-2 MONITORING WELL INSTALLED DURING RI

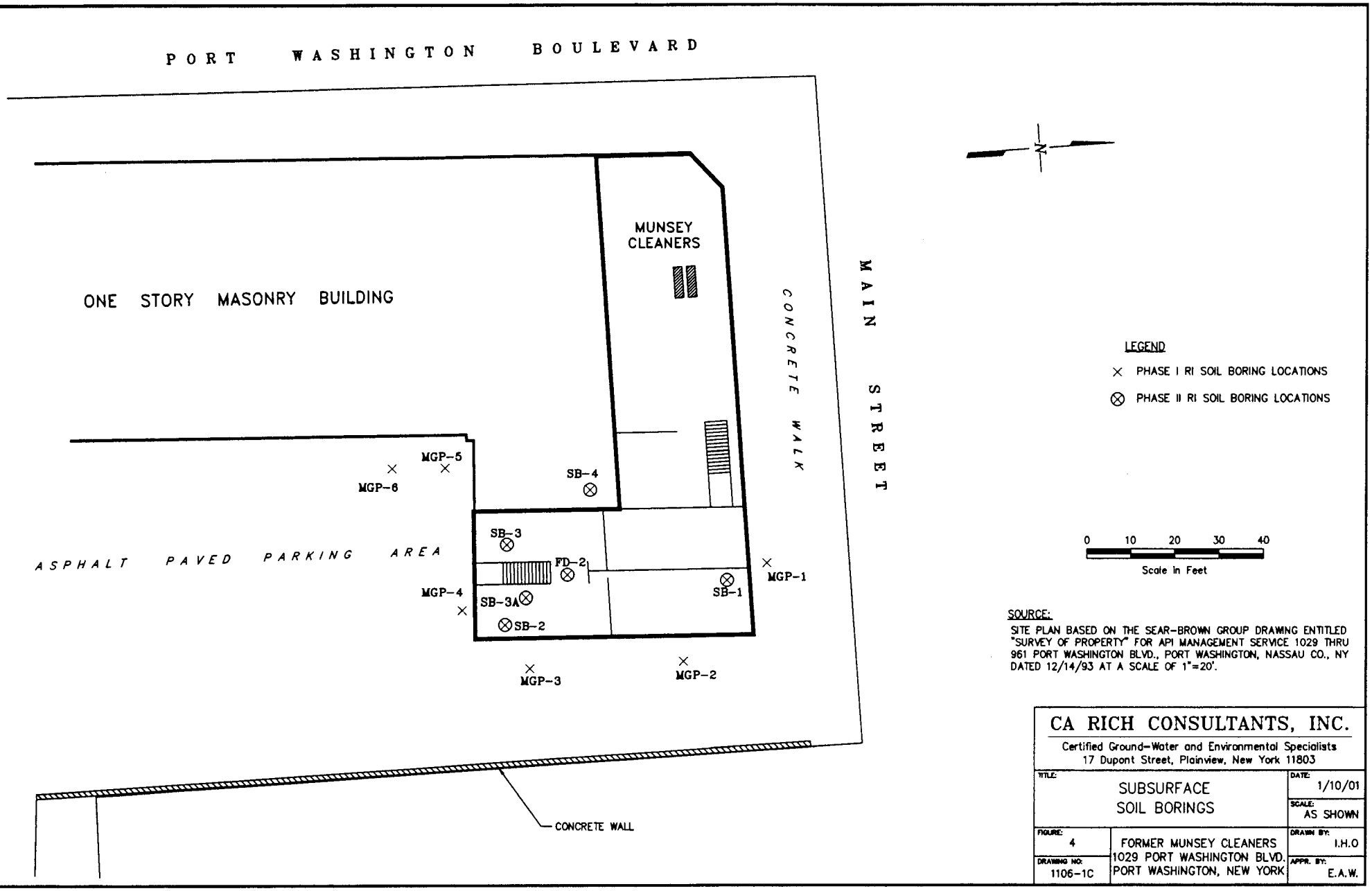
MUN-2 GEO-PROBE SAMPLING POINTS INSTALLED DURING PSA

N

CA RICH CONSULTANTS, INC.

Certified Ground-Water and Environmental Specialists
17 Dupont Street, Plainview, New York 11803

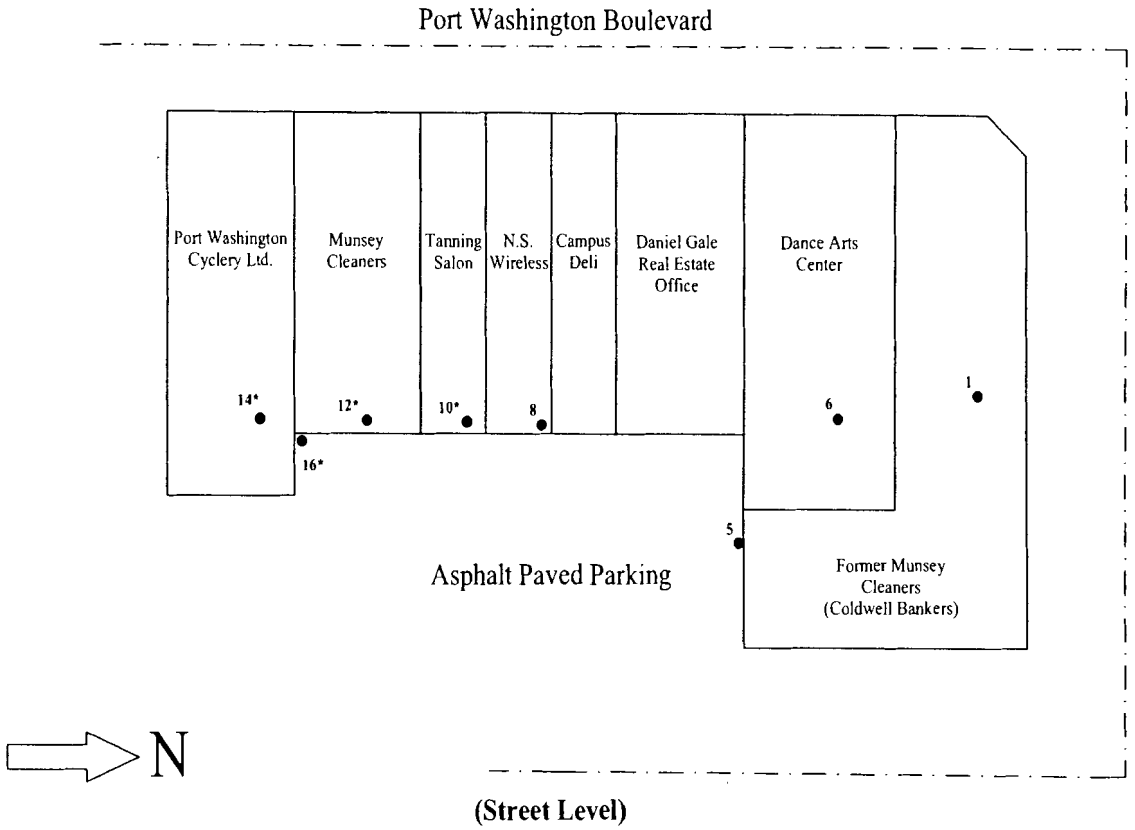
TITLE: Monitoring Well Location Map		DATE: 12/10/01
		SCALE: As Shown
FIGURE: 3	Former Munsey Cleaners Site Port Washington, New York	DRAWN BY: S.T.M./I.H.O
DRAWING NO: 1105-1A		APPR. BY: E.A.W.



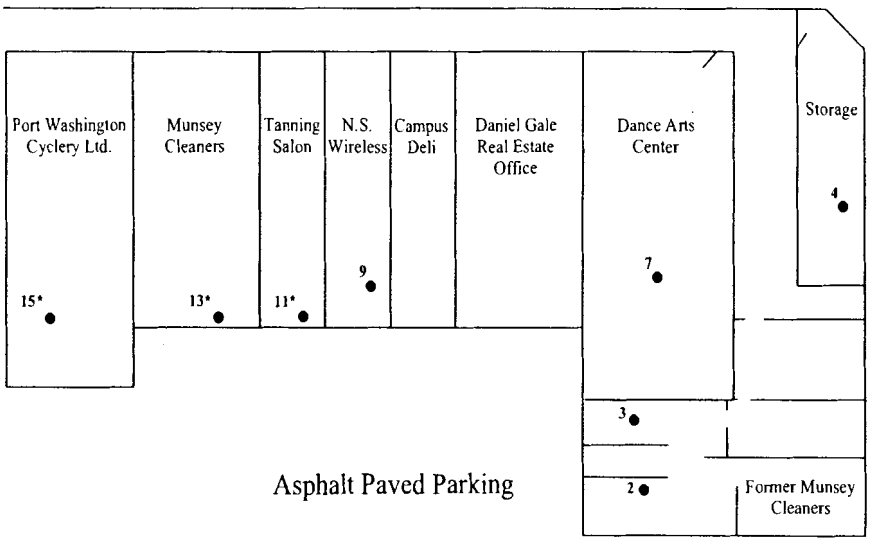
SOURCE:

SITE PLAN BASED ON THE SEAR-BROWN GROUP DRAWING ENTITLED "SURVEY OF PROPERTY" FOR API MANAGEMENT SERVICE 1029 THRU 961 PORT WASHINGTON BLVD., PORT WASHINGTON, NASSAU CO., NY DATED 12/14/93 AT A SCALE OF 1"=20'.

CA RICH CONSULTANTS, INC.		
Certified Ground-Water and Environmental Specialists 17 Dupont Street, Plainview, New York 11803		
TITLE: SUBSURFACE SOIL BORINGS		DATE: 1/10/01
		SCALE: AS SHOWN
FIGURE: 4	FORMER MUNSEY CLEANERS 1029 PORT WASHINGTON BLVD. PORT WASHINGTON, NEW YORK	DRAWN BY: I.H.O
DRAWING NO: 1106-1C		APPR. BY: E.A.W.



(Street Level)



(Lower Level)

0 30 60

Scale in feet

Legend	
1 = 1st Floor Open Room	9 = N.S. Wireless Basement
2 = Basement South East	10 = Tanning Salon
3 = Basement South West	11 = Tanning Salon Basement
4 = Basement Dry Store Room	12 = Munsey Cleaners
5 = Outdoors	13 = Munsey Cleaners Basement
6 = Dance Studio	14 = Bicycle Shop
7 = Dance Studio Basement	15 = Bicycle Shop Basement
8 = N.S. Wireless	16 = Oudoors South

= Proposed New Sampling Location*

Laurel Environmental Associates, Ltd.

Laurel Environmental Associates, Ltd

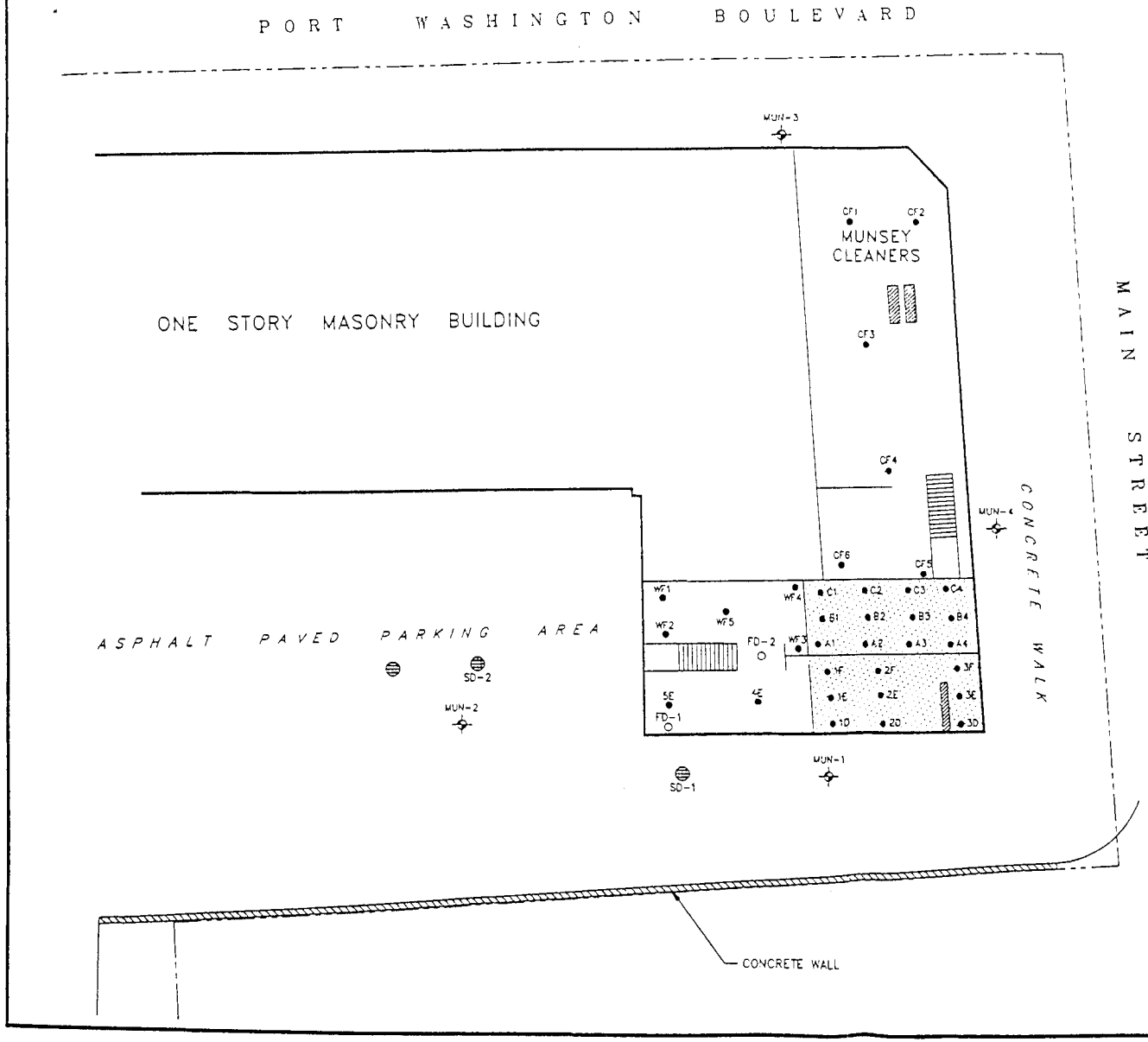
52 Elm Street
Huntington, NY 11743
631-673-0612

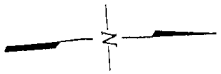
Drawn by: ZHB 4/29/04
Scale: As Shown

Figure 5

Proposed
Air Quality Sampling Locations

Former Munsey Cleaners
1029 Port Washington Blvd.
Port Washington, New York





LEGEND

- GROUNDWATER SAMPLE POINT
- SOIL PROBE SAMPLE POINT
- FLOOR DRAIN
- STORM DRAIN
- EARTH FLOOR
- PROPERTY BOUNDARY

0 10 20 30 40

Scale in Feet

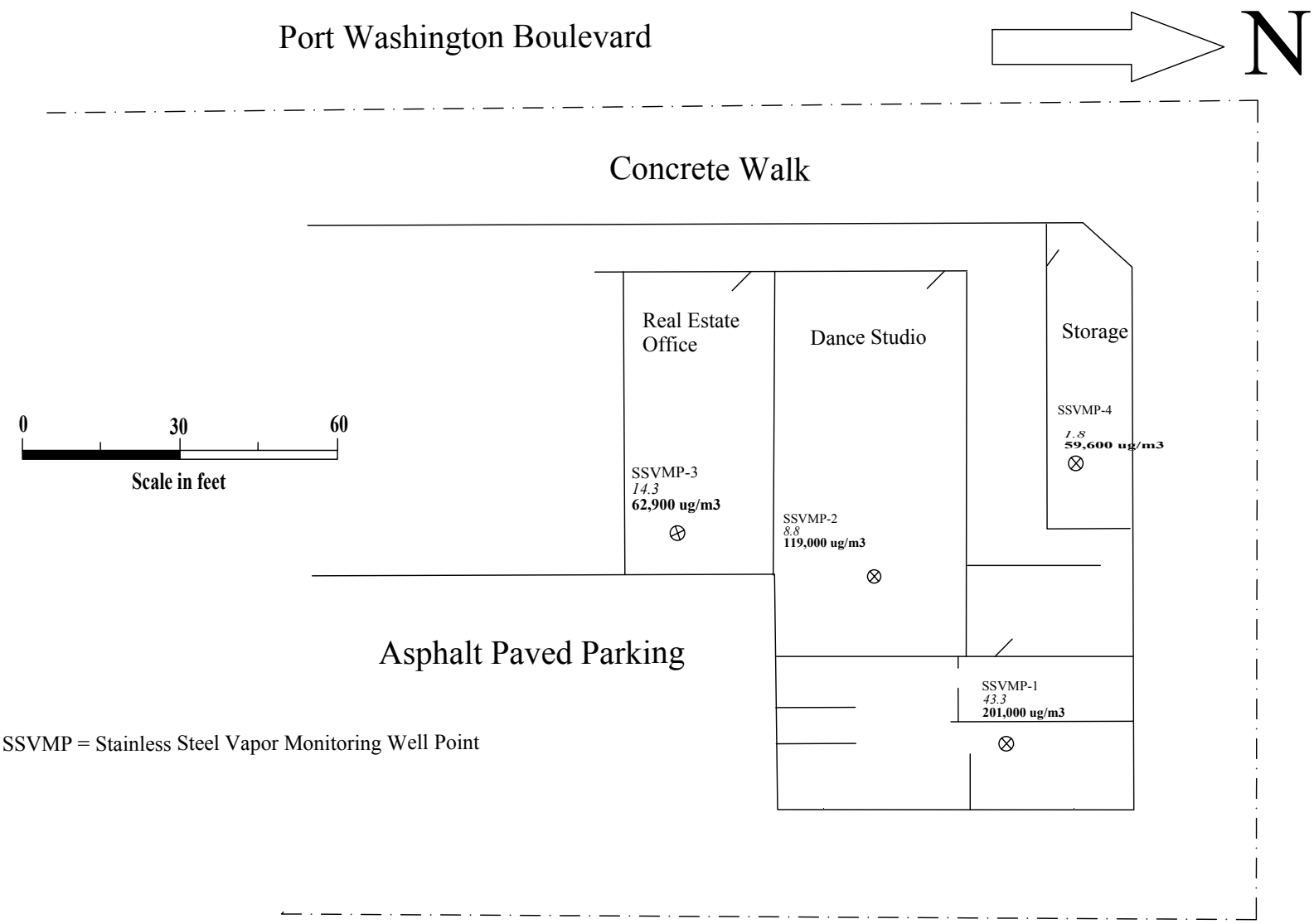
SOURCE:

SITE PLAN BASED ON THE SEAR-BROWN GROUP DRAWING ENTITLED "SURVEY OF PROPERTY" FOR API MANAGEMENT SERVICE 1029 THRU 961 PORT WASHINGTON BLVD., PORT WASHINGTON, NASSAU CO., NY DATED 12/14/93 AT A SCALE OF 1"=20'.

CA RICH CONSULTANTS, INC.

Certified Ground-Water and Environmental Specialists
404 Glen Cove Avenue, Sea Cliff, NY 11579

TITLE: DETAILED SITE PLAN AND LOCATION OF SOIL PROBE POINTS		DATE: 8/21/9[illegible]
		SCALE: AS SHOWN
FIGURE: 6	MONTFORT TRUSTS 1029 PORT WASHINGTON BLVD. PORT WASHINGTON, NEW YORK	DRAWN BY: J.J.S
DRAWING NO: 3240-01B.2		APPR. BY: G.T



Laurel ENVIRONMENTAL ASSOCIATES, LTD	**Laurel Environmental Associates, Ltd.** 52 Elm Street Huntington, NY 11743 631-673-0612	Drawn by: KMT 10/12/02 Revised by: KMT12/3/02 Revised by: ZHB 10/10/03	Figure 7 Soil Gas Survey Points Sampling completed on August 2002
		Scale: 1" = 30'	Former Munsey Cleaners 1029 Port Washington Blvd. Port Washington, New York

APPENDIX A

Responsiveness Summary

RESPONSIVENESS SUMMARY

Former Munsey Cleaners Site
Operable Unit No. 1
Town N. Hempstead, Nassau County, New York
Site No. 1-30-081

The Proposed Remedial Action Plan (PRAP) for the Munsey Cleaners site, was prepared by the New York State Department of Environmental Conservation (NYSDEC) in consultation with the New York State Department of Health (NYSDOH) and was issued to the document repositories on July 11, 2005. The PRAP outlined the remedial measure proposed for the contaminated soil, groundwater and indoor air at the Former Munsey 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 July 27, 2005, which included a presentation of the Remedial Investigation (RI) and a discussion of the proposed remedy. The meeting provided an opportunity for citizens to discuss their concerns, ask questions and comment on the proposed remedy. These comments have become part of the Administrative Record for this site. The public comment period for the PRAP ended on August 16, 2005. The NYSDEC received a comment letter from "Residents For A More Beautiful Port Washington" dated August 15, 2005.

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

1. Question: How often will the groundwater and indoor air will be sampled?

   Response: After the Record of Decision (ROD) is completed which will finalize the remedy for the site, a Site Management Plan will be developed to include the operation and maintenance of the systems installed at the site. The plan will also include the sampling at the site. The sampling of indoor air at the site will be done on a quarterly basis for the first year and semi-annual thereafter with one sample during the heating season. The sampling of groundwater will be done semi-annual for the first year and annual thereafter. Based on the results of the sampling events, the NYSDEC in conjunction with NYSDOH will determine the frequency of the sampling to be increased or decreased.

2. Question: What is the depth to groundwater beneath the building?

   Response: The depth to groundwater in the area of investigation is approximately 20 feet from the surface.

3. Question: Why was the soil vapor extraction (SVE) turned off initially? Is soil vapor the source of the indoor air or the soil contamination? What was the reason for the rebound in indoor air concentration when the SVE extraction system was turned off? Where are the SVE extraction wells located? Was the SVE system successful in reducing contamination levels where it was placed? If you have remediated the contaminated soil, why does a soil vapor problem still exist at the site?

   Response: Based on the Preliminary Site Assessment, approximately 30 tons of contaminated soil was excavated from the basement of the site and disposed of in an off-site landfill. The SVE system was installed at the site to address the residual contamination in soil. It was operated for approximately one year and six months. It was turned off based on soil confirmatory samples collected from the basement. The results from this sampling event showed that the contamination in soil had been reduced below the guidance values. The SVE system was successful in reducing the contamination in soil.

   The slight increase in indoor air concentrations of PERC in October 2004 was likely due to the beginning of the heating season. The increase occurred before the SVE system was shut off. Some fluctuations in indoor air concentrations are expected.

   The SVE wells were originally placed in areas where the concentrations of PERC in soil were highest. Based on the results of the Soil Vapor Gas survey conducted at the site, the sub-slab depressurization wells were placed in locations of higher concentrations of PERC under the concrete slab. For more information on the location of the sub-slab system well locations, please refer to the Quarterly Monitoring report included in the Administrative Record. The indoor air contamination currently found at the site could be either from groundwater contaminated with PERC, residual contaminated soil or residual contaminated soil vapor.

4. Question: Will the system stay in operation to make certain contamination does not enter other buildings, even though it has reached guidance levels at the former Munsey Cleaners site?

   Response: It is expected that the SVE and the sub-slab systems will be continuously operated and maintained for a minimum of five years and will be evaluated at the end of the five year period to determine the necessity for continued operation of the systems. The recent indoor air results show that the levels of contamination in indoor air have been significantly reduced in all locations of the plaza. An off-site soil vapor investigation will be conducted to evaluate the need for additional remedial measures.

5. Question: How does the sub slab venting system work?

   Response: A Sub-slab depressurization system is the most common and often the most reliable system to remove vapors from under the concrete slab located in the basement.

One or more suction pipes are inserted through the floor slab into the crushed rock or soil underneath. The number and location of suction pipes that are needed depends on how easily air can move in the soil under the slab, and on the strength of the contamination source. A vent fan connected to the suction pipe(s) draws the vapors from below the basement floor and releases it into the outdoor air while simultaneously creating a negative pressure (vacuum) beneath the slab. This prevents soil vapor under the slab from entering the above structure. More information can be found on the NYSDOH website under the following link:http://www.health.state.ny.us/nysdoh/gas/svi_guidance/

6. Question: Dividing the site into two operational units is improper and should not be done. There is a concern that the Department will forget the off-site groundwater contamination by dividing the site into operable units.

   Response: The site already had been separated into separate operable units to expedite work at the site. Reversing the decision would delay progress at both operable units. Operable units are created to effectively accelerate the remedial process at a site. NYSDEC already had enough information to select a remedy for OU1 whereas additional investigation work is still required for OU2. OU2 is further complicated because there are multiple potentially responsible parties (PRPs) and coordination among the PRPs is required. NYSDEC is required to give the PRPs an opportunity to perform the remedial work. The NYSDEC will contact with PRPs to address the off-site contamination (OU2). Since this coordination will take additional time, OU1 was separated out so that implementation of OU1 was not further delayed. The NYSDEC efforts can now be focused on the offsite areas and will help us to more quickly bring that effort to completion.

7. Question: What are the potential impacts from the contamination found in MC-3 monitoring well? According to United States Environmental Protection Agency's (USEPA) guidance, 400 part per billion (ppb) of PERC found in MC-3 well will create a soil vapor problem. What timetable will be established to do offsite work relating to groundwater contamination and soil vapor intrusion? Will state money be used to fund this work, if the PRPs did not agree to do so?

   Response: The investigation for off-site contamination will include evaluating the potential impact from off-site groundwater contamination including soil vapor intrusion concerns. After the completion of the ROD for OU1, an effort will made to negotiate with the PRPs to address the off-site groundwater contamination. If the PRPs do not agree to perform the off-site investigation, the State will do it with available funds. We estimate that an off-site investigation will begin as early as possible. As a first step, indoor air sampling of the properties located over the groundwater plume will be conducted this winter.

8. Question : The source of contamination from Munsey Cleaners appears to be headed directly to MC-3 and where people live. Contamination also appears to be going directly

into Long Island Sound. What happens when PERC goes into surface water? What damage does this contamination do to people who live at or near MC-3? What do these readings mean to people who live in this area? What is the time line for OU2?

Response: Please refer to Question 7 and the response. If the groundwater contamination plume reaches surface water, PERC would enter the surface water body and dissipate due to mixing and volatilization. The off-site investigation will determine the extent of the groundwater plume migrating from the site and will include the sampling of any surface water bodies suspected of being impacted by the contaminated groundwater migrating from the site.

9. Question: Vapor intrusion investigations are typically done during the winter months. Will you be doing that this winter? Can we count on you to do this work this winter?

Response: Please refer to Question 7 and the response.

10. Question: There are two properties just south of the former Munsey Cleaners, which share a common basement. One is a children's dance studio, which had even higher concentrations than Munsey. How do we make certain that those levels are below standards? Will you continue to monitor the upstairs and downstairs for indoor air in this area?

Response: The indoor air sampling results obtained from May 2005 show that the concentration of PERC on the first floor of the Dance studio is below typical background concentrations and is comparable to background levels in the basement. Sample results from the first floor of the Dance Studio have never exceeded guidelines for PERC in indoor air. Monitoring of indoor air will continue as discussed in Response 1.

11. Question: Munsey Cleaners has moved again to a new location. Will the State make sure that they are not polluting again?

Response: The NYSDEC will make sure the facility abides by the regulations for disposing waste generated at the facility.

12. Question: What is the acceptable exposure level for PERC for children?

Response: The NYSDOH has established a guideline of 100 micrograms per cubic meter (ug/m3) for PERC in indoor and outdoor air, with a goal of reaching the background concentrations. This levels takes into consideration sensitive populations such as children and is protective of public health.

13. Question: Is the local water district eligible to receive approximately $900,000 in reimbursement due to the fact that they had to install a new operation system in order to deal with the PERC contamination?

Response: The 'Sandy Hollow' well system is located downgradient to the MC-3 well installed for the site. The groundwater pumped at Sandy Hollow is being treated to remove volatile organic compounds unrelated to the site. PERC has not been detected in the raw water supply and the dry cleaner has therefore not impacted the water supply. An off-site investigation will be conducted to evaluate the impacts of the off-site groundwater contamination.

14. Question: Will the former Munsey Cleaners site ever be made available to become a food (restaurant) facility? Will this change in status allow food facilities to use this site for business?

Response: The NYSDOH and NYSDEC have not been opposed to the site being used as a restaurant since the remedial systems were in place at the site and maintain this position. The remedial measures conducted to-date are protective of public health.

15. Question: When the pizza parlor was proposed for this site, our toxicologist stated that PERC adheres to fats. Do you disagree with this statement?

Response: There is evidence that PERC can adhere to fats and we do not disagree with this statement. However, the exposure from eating food that has absorbed PERC from contaminated air is likely to be much lower than air exposures at the NYSDOH guideline, and thus, it unlikely to cause health effects.

16. Question: What is the time line for beginning the off-site soil vapor investigation? When will it start? Is it possible that you do not have to wait for a signed consent order, and that you can begin this investigation now. Is it possible that you can begin the OU2 investigation now and then go after the PRP for payment?

Response: Please refer to Question 7 and the response. The NYSDEC will give the PRPs an opportunity to take the responsibility of conducting the investigation off-site. If the PRPs do not agree to sign a consent order, then the State will conduct the investigation and seek to recover the cost of conducting the investigation from the PRPs.

17. Question: There seems to be some resistance to reduction efforts in the southeast corner of the basement of the Munsey Cleaners site. Have you characterized the site to see if we have a source upgradient?

Response: During the Phase I investigation, sub surface soil borings were installed at the perimeter and outside of the site. The results from this sampling event indicated that the soil upgradient is not contaminated. The results from the May 2005 indoor air sampling event showed significant reduction in PERC concentration in the southeast corner of the basement compared to the sampling event of January 2005. The continuous operation of

the remedial systems installed at the site will further reduce the contaminant concentration in the southeast corner.

18. Question: I would like you to continue to follow the groundwater plume downgradient, rather than changing the classification of the site from a 2 to a 4. Why separate the site into two operable units?

    Response: We have not proposed to change the classification of the site at this time because of the groundwater contamination found on and off-site. Please refer to Question 6 and the response for operable units.

19. Question: Indoor air tests are usually done in the winter. Have you ever tested during heavy rain seasons? We occupy the first floor of the site where Munsey Cleaners was and there is a 'sulfuric smell' from the vent in the bathroom and at the basement door. Will you test the indoor at the site during rainy seasons?

    Response: The indoor air has been sampled under a variety of conditions at this location and PERC has always been below the guidance value. The odors described are indicative of issues with the sewer system. This matter will be referred to the proper contact for follow-up.

20. Question: Will you test my home because I live closer to MC-3 well location?

    Response: Yes. When we schedule a sampling event to test the properties located over the groundwater plume, we will include your property.

21. Question: It appears that there are new guidance levels for PERC that are putting them at the 3 and 30 levels, should the line you showed on your graph (100 action line) be lowered to 3 rather than remaining at 100? As new guidance levels are created, are PRPs grand-fathered and only subject to cleanup the site based on the levels that were in effect when they entered into an agreement, or do they have to keep up with new guidance levels?

    Response: The term 'new guidance' is referring to the draft NYSDOH Guidance for Evaluating Soil Vapor Intrusion in New York State. The numbers presented in the decision matrix of this document are consistent with the previously established guideline of 100 ug/m3, in that both require mitigation at this level. The NYSDEC takes reasonable and practical measures to reduce exposures whenever possible. PRPs must complete remedial measures according to the most recent standards and guidance.

22. Question: What is a sub slab ventilation system? Is it a positive pressure system?

    Response: Please refer to Question 5 and the response. The sub slab system creates a negative pressure under the concrete slab, whereas a positive pressure system introduces

air to a building's interior to create positive pressure indoors. This helps prevent sub-slab vapors from entering through openings in the basement or foundation.

23. Question: Do we know what happens to PERC once it is dispersed into the air due to the operation of the sub slab venting system? Do we know the direction of the predominant winds in this area? and where these winds may carry this product? Can the sub-slab system be tied into the SVE treatment system? It would make it safer and bring it closer to background.

    Response: During the start up and operation of the sub slab system, samples were obtained from the stack. The results from these samples showed that the PERC in the stack is below the guidance values of Air Guide1 issued by the NYSDEC and therefore is in compliance with the NYSDEC regulations. To review the samples results, please refer to the quarterly monitoring reports included in the Administrative Record. Air Guide1 is available on the NYSDEC's web site for review. Additional samples will be obtained per the Site Management Plan that will be prepared after the completion of the ROD for OU1. The predominant wind direction in this area is from the west, thereby dispersing the stack emissions to the east of the site. We will evaluate the potential for connecting the emissions from the sub slab system through the treatment process of the SVE system.

Written Comment:

The NYSDEC received a PRAP comment letter from "Residents For A More Beautiful Port Washington" dated August 15, 2005. A copy of the letter is attached. We appreciate your interest in this site and the continued input from the public in the decision making process. The following three issues are in the second page of the letter for immediate actions:

- Conduct indoor air sampling of residences located on top of the groundwater plume and abate any indoor air impacts found to be a threat to occupants of the residences.

- Perform a follow-up investigation to determine the extent of PERC in soil vapor and ground beneath the residential community to make sure that it is not spreading into other areas or contaminating public water supply wells.

- Require the businesses responsible for the soil vapor and groundwater pollution to take full responsibility for all costs associated with its investigation and remediation.

Response: We agree with all these actions. We are making plans to sample for vapor intrusion on properties located above the groundwater plume this winter. The OU2 investigation to determine the extent of groundwater contamination will be conducted as early as the negotiations with the responsible parties are completed. As of now, the responsible parties have taken complete responsibility for all investigations and remedial actions implemented at the site. As

stated earlier, we will negotiate with the responsible parties to undertake the off-site investigation.

The comment regarding the separation of the site into separate operable units was raised during the public meeting. We disagree with this comment. To focus on OU2 and complete the off-site investigation, it was necessary to separate the site into two operable units. In addition to that, OU1 needs an operation, maintenance and monitoring plan to check whether the remedial actions implemented at the site are effective. For this purpose, a consent order must be negotiated with the responsible party separately.

Although the site is separated into two operable units, the site will not be reclassified until the remedial efforts on both units are implemented and effective. The responsible parties will not be relieved from the responsibility at both operable units until the remedial goals are achieved.

In general, the comments stated in this letter have been included in this responsiveness summary. In particular, please refer to responses to questions 6, 7, 8, 9 and 18 for additional information.

APPENDIX B

Administrative Record

Administrative Record

Former Munsey Cleaners Site
Operable Unit No. 1
Site No. 1-30-081

1. Preliminary Site Assessment Report, CA Rich Consultants, September 1996
2. Interim Remedial Measures Report, CA Rich Consultants, December 1997
3. Interim Remedial Measures Report, Addendum #1, CA Rich Consultants, April 1998
4. Focused Remedial Investigation Work Plan, CA Rich Consultants, March 2000
5. Order on Consent, Index No. W1-0750-98-04, between NYSDEC and the Montford Trust, executed on October 07, 2000.
6. Focused Remedial Investigation Report, CA Rich Consultants, June 2001
7. Phase II Remedial Investigation Work Plan, CA Rich Consultants, February 2002.
8. Air Dynamics Investigation Report, CA Rich Consultants, March 2002
9. Modification to Order on Consent Index No. W1-0750-98-04, between NYSDEC and the Montford Trust, executed on May 07, 2002.
10. Phase II Remedial Investigation Report, Laurel Environmental, June 2003
11. Quarterly Sampling Report I, Laurel Environmental, December 2003
12. Quarterly Sampling Report II, Laurel Environmental, June 2004
13. Quarterly Sampling Report III, Laurel Environmental, December 2004
14. Proposed Remedial Action Plan, NYSDEC, June 2005