PROPOSED REMEDIAL ACTION PLAN
Campagnolo Property
State Superfund Project
City of Ithaca, Tompkins County, New York
Site No. 755013

March 2010

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

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SECTION 1: SUMMARY AND PURPOSE OF THE PROPOSED PLAN

The New York State Department of Environmental Conservation (the Department), in consultation with the New York State Department of Health (NYSDOH), is proposing a remedy for the above referenced site. The disposal of hazardous waste at the site has resulted in threats to public health and the environment that would be addressed by the remedy proposed by this Proposed Remedial Action Plan (PRAP). The disposal of hazardous wastes at this site, as more fully described in Sections 5 of this document, have contaminated various environmental media. The proposed remedy, discussed in detail in Section 8, is intended to attain the remedial action objectives identified for this site in Section 6 for the protection of public health and the environment. This PRAP identifies the preferred remedy, summarizes the other alternatives considered, and discusses the reasons for the preferred remedy. The Department will select a final remedy for the site only after careful consideration of all comments received during the public comment period.

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 PRAP in accordance with the requirements of 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. This document is a summary of the information that can be found in the site related reports and documents which are available for review at the document repositories. The public is encouraged to review the reports and documents, which are available at the following repositories:

Tompkins County Library
101 East Green Street
Ithaca, New York 14850
(607) 272-4557

Hours:
Monday – Thursday 10:00am to 8:15pm
Friday – Saturday 10:00am to 5:00pm
Sunday -1:00pm to 5:00pm

By appointment only:

Gary Priscott, Project Manager
NYSDEC Region 7 – Kirkwood Sub-office
1679 NY Route 11
Kirkwood, New York 13795-1602
(607) 775-2545

Diane Carlton, Citizen Participation Specialist
NYSDEC Region 7 Office
615 Erie Boulevard West
Syracuse, New York 13204-2400
(315) 426-7413

The Department seeks input from the community on all PRAPs. A public comment period has been set from March 15, 2010 to provide an opportunity for public participation in the remedy selection process. A public meeting is scheduled for April 6, 2010 at the City of Ithaca, City Hall beginning at 7:00 pm.

At the meeting, the findings of the remedial investigation (RI) and the feasibility study (FS) will be presented along with a summary of the proposed remedy. After the presentation, a question-and-answer period will be held, during which verbal or written comments may be submitted on the PRAP. Written comments may also be sent to Mr. Priscott at the above address through April 20, 2010.

The Department may modify the proposed remedy or select another of the alternatives presented in this PRAP, based on new information or public comments. Therefore, the public is encouraged to review and comment on all of the alternatives identified here. Comments will be summarized and addressed in the responsiveness summary section of the Record of Decision (ROD). The ROD is the Department's final selection of the remedy for this site.

SECTION 2: SITE DESCRIPTION AND HISTORY

2.1: Location and Description

The Campagnolo Property (the site) is located on North Meadow Street (Route 13) between Cascadilla and Esty Streets in the City of Ithaca, Tompkins County (Figure 1). The site is approximately 0.5 acres in size and includes a two-story commercial building. The building is a slab-on-grade structure approximately 3,200 square feet in size. The building is currently leased for various commercial services. Asphalt and/or concrete paved parking surfaces surround the building on all sides. Adjacent parcels are currently used for a combination of commercial and residential purposes. The grade at the site is generally flat with an elevation of 386 feet above mean sea level. The north-flowing Cayuga Inlet, a NYSDEC Class C(T) stream, is approximately 1,000 feet west of the site. The 315 North Meadow Street inactive hazardous waste site (Site No. 755014) is located two blocks to the south.

The generalized site geology indicates a layered system characterized at the surface with a fill layer ranging from 2 to 4 feet thick across the area. The fill material consists primarily of clay and silt mixed with some ash, wood, cinder, and gravel. The fill overlies an approximately 11- to 12-foot thick silt and clay unit containing thin and discontinuous sand and silt layers.

The silt and clay unit overlies a silty fine sand unit ranging in thickness from approximately 11.5 to 12.5 feet. The silty fine sand unit overlies a clayey silt unit present at approximately 28 feet below ground surface (bgs).

Groundwater at the site was first encountered within the discontinuous sand and silt layers of the silt and clay unit. The depth to groundwater measured in shallow monitoring wells has ranged from approximately 4 to 8.5 feet bgs. The general direction of groundwater flow is to the west-northwest.

2.2: Operational/Disposal History

The site was used for a dry cleaning service from the late 1960s through 1977. An approximately 18-pound dry cleaning machine was located in the building, and an aboveground solvent tank was formerly located outside on the east side of the building. Tetrachloroethene (PCE) had previously been used in dry cleaning operations as a cleaning solvent but is not currently used at the site.

2.3: Remedial History

1. Remedial Parties and Program.

The site remedial program is being performed by the Department through the State Superfund Program.

As a result of identified hazardous waste disposal, the Department listed the site as a Class 2 site in the Registry of Inactive Hazardous Waste Disposal Sites in New York in March, 2006. 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.

2. Investigation/Actions.

- Environmental Site Assessment conducted in connection with a potential property transaction completed in 2001.
- On-site soil vapor intrusion investigation completed in 2002.
- Mitigation of on-site building completed in 2003.
- Immediate Investigation Work Assignments to conduct off-site soil vapor intrusion investigations completed in 2005 and 2006.
- Mitigation of two off-site buildings completed in 2005.

SECTION 3: LAND USE

The Department may consider the current, intended, and reasonable anticipated future land use of the site and its surroundings when assessing the nature and extent of contamination. For this site, alternatives that may restrict the use of the site to commercial criteria as described in Part 375-1.8 (g) are being evaluated because the property is zoned commercial and it corresponds with the contemplated future use of the site. A comparison of the appropriate SCGs for the identified land use against the unrestricted use SCGs for the site contaminants is included in the Tables for the media being evaluated in section 5.1.2.

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 PRPs for the site, documented to date, include: Benedetto and Giuliano Campagnolo.

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 5: SITE CONTAMINATION

A remedial investigation has been conducted to determine the nature and extent of contamination and 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 Remedial Investigation (RI) was to define the nature and extent of any contamination resulting from previous activities at the site. The RI was conducted between March 2007 and March 2008. The field activities and findings of the investigation are described in the RI Report.

The following activities were conducted during the RI:

- Research of historical information,
- Soil borings, and monitoring well installations,
- Sampling of subsurface soils, groundwater and soil vapor,
- Ecological and Human Health Exposure Assessments.

5.1.1: 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 surface and subsurface soil. The NYSDOH has developed SCGs for drinking water and soil vapor intrusion. The tables found in the following Sections list the applicable SCG in the footnotes. For a full listing of all SCGs see: http://www.dec.ny.gov/regulations/61794.html.

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 require remediation. These are summarized in Section 5.1.2. More complete information can be found in the RI Report.

5.1.2: Nature and Extent of Contamination

This section describes the findings of the remedial investigation. As described in the RI Report, waste/ source materials were identified at the site and are impacting groundwater, soil, and/or soil vapor.

Groundwater

Groundwater samples were collected from the overburden using temporary sampling points and monitoring wells. The samples were collected to assess groundwater conditions on- and off-site. The results indicate that contamination in the shallow groundwater at the site exceeds the SCGs for volatile organic compounds. In general, the horizontal extent of groundwater contamination is limited to the site property and areas immediately adjacent and does not extend past the west side of N. Meadow Street. No site-related contamination was found in groundwater samples collected from deeper portions of the overburden. Table 1 includes all contaminants that exceed the groundwater and drinking water SCGs.

Table 1 - Groundwater

Detected Constituents	Concentration Range Detected (ppb)[a]	SCG[b] (ppb)	Frequency Exceeding SCG
cis -1,2-Dichloroethene	0.60 – 207	5	7 of 34
trans - 1,2-Dichloroethene	0.11 – 5.97	5	1 of 34
Benzene	0.43 – 4.54	1	1 of 34
Isopropylbenzene	0.20 – 17.5	5	1 of 34
Tetrachloroethene	0.12 – 31.9	5	6 of 34
Trichloroethene	0.36 – 6.56	5	1 of 34
Vinyl chloride	0.63 – 37.3	2	6 of 34

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).

The primary groundwater contaminants of concern at the site are tetrachloroethene (PCE) and its breakdown products, including cis-1,2-dichloroethene (cis-1,2-DCE), trichloroethene (TCE), and/or vinyl chloride. PCE and its breakdown products are associated with the former on-site dry cleaning operation. The concentrations and distribution of the contaminants of concern are shown on Figure 2. Based on the findings of the RI, the disposal of hazardous waste has resulted in the contamination of groundwater. The site contaminants that are considered to be the primary contaminants of concern which will drive the remediation of groundwater to be addressed by the remedy selection process are: PCE, cis-1,2-DCE, TCE, and vinyl chloride.

Subsurface Soil

Subsurface soil samples were collected at the site during the RI. Subsurface soil samples were collected below pavement materials to depths as great as 10 feet below ground surface to assess soil contamination impacts to groundwater. The results indicate that soils at the site do not exceed the unrestricted SCG for volatile organic compounds. The distribution of soil sampling locations is depicted on Figure 3.

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

Soil Vapor Intrusion

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 intrusion samples (a combined sample set including sub-slab, indoor, and outdoor air) were collected in 2007 and 2008 to complement the air sampling investigation that began in 2005. From 2005 to 2008, soil vapor intrusion samples were collected from 16 residential and/or commercial buildings surrounding the Campagnolo Property site. Figure 4 shows the general locations of the buildings sampled. Based on the air sampling results, the Department installed sub-slab depressurization (SSD) systems at two off-site commercial buildings. (The property owner had previously installed a SSD system beneath the on-site building.) Subsequent inspections of the SSD systems, including post-mitigation air sampling, indicated they are properly operating as designed. Overall, the results of the air sampling effort indicated that no sampling of additional buildings was needed to assist with the completion of the RI. However, based on air sampling results, one residential building near the site should be monitored periodically to evaluate concentration changes over time.

In addition, one residential property adjacent to the site had been vacant throughout all site investigations. The unoccupied status of the property had been verified through conversations with the site owners and neighboring property owners. The building appeared abandoned and it was confirmed that the utilities had been disconnected. However, during a site visit in 2009, it was discovered that this property now has a residential tenant. Due to this building's proximity to the site and to areas of groundwater contaminated with VOCs, soil vapor intrusion sampling should be conducted at this location.

The primary soil vapor contaminants are tetrachloroethene (PCE) and trichloroethene (TCE), which are associated with the former on-site dry cleaning operation.

Based on the findings of the Remedial Investigation, the disposal of hazardous waste has resulted in the contamination of soil vapor. The site contaminants that are considered to be the primary contaminants of concern which will drive the remediation of soil vapor to be addressed by the remedy selection process are, PCE and TCE.

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 issuance of the Record of Decision.
Mitigation measures were taken at the on-site building and two adjacent off-site buildings to address current and/or potential indoor air contamination of volatile organic compounds associated with soil vapor intrusion. As discussed above, this involved the installation of SSD systems beneath each of the buildings.

5.3: Summary of Human Exposure Pathways:

This section describes the current or potential human exposures (the way people may come in contact with contamination) that may result from the site contamination. A more detailed discussion of the human exposure pathways can be found in the RI report available at the document repository. 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.

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.

Currently, there are no completed exposure pathways associated with the site. Exposure to site-related contaminants via inhalation of indoor air was previously identified as a completed exposure pathway for some buildings surrounding the site. As a result, sub-slab depressurization systems were installed and continue to operate to ensure that site-related sub-slab contaminants do not affect the indoor air of buildings near the site. Consumption of contaminated groundwater is not expected because the site and surrounding area are serviced by a municipal drinking water supply. Human contact with any soil contamination at the site is also not expected because the entire site is covered by the building footprint and asphalt-paved surfaces.

Potential exposure pathways that exist for the site include dermal contact with any residual contaminated soil and groundwater in the event that future subsurface excavation occurs at the site, and inhalation of contaminated air in any future constructed buildings through soil vapor intrusion.

5.4: 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.

The Campagnolo Property is located in an urban area, with the entire site covered by a building and paved parking. Significant proportions of the land surrounding the site are also covered by either buildings and/or pavement. Based on the location of the site and the conditions summarized above and in Section 2.1, a Fish and Wildlife Impact Analysis (FWIA) was not included in the RI.

Surface water resources at or near the site include Cayuga Inlet, a NYSDEC Class "C" trout stream, located approximately 1,000 feet west of the site. No current or potential site-related surface water impacts have been identified.

Groundwater resources at the site include an overburden groundwater unit. The generalized hydrogeologic characteristics of the overburden groundwater unit are presented in Section 2.1. Site related contamination is impacting groundwater. The groundwater is not used as a source of potable water. Protection of the groundwater resource will be addressed in the remedy selection process.

SECTION 6: 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 objectives for this site are:

Public Health Protection

Groundwater

- Prevent people from drinking groundwater with contaminant levels exceeding drinking water standards.
- Prevent contact with contaminated groundwater.
- Prevent inhalation of contaminants from groundwater.

Soil

- Prevent ingestion/direct contact with any residual contaminated soil.

Soil Vapor

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

Environmental Protection

Groundwater

- Restore the groundwater aquifer to meet ambient groundwater quality criteria, to the extent feasible.
- Prevent discharge of contaminated groundwater to surface water.

SECTION 7: SUMMARY OF THE EVALUATION OF ALTERNATIVES

To be selected the remedy must be protective of human health and the environment, be cost-effective, comply with other statutory requirements, and utilize permanent solutions, alternative technologies or resource recovery technologies to the maximum extent practicable. Potential remedial alternatives for the Site were identified, screened and evaluated in the feasibility study which is available at the document repositories established for this site.

A summary of the remedial alternatives that were considered for this site is presented below.

Cost information is presented in the form of present worth, which represents the amount of money invested in the current year that would be sufficient to cover all present and future costs associated with the alternative. This enables the costs of remedial alternatives to be compared on a common basis. As a convention, a time frame of 30 years is used to evaluate present worth costs for alternatives with an indefinite duration. This does not imply that operation, maintenance, or monitoring would cease after 30 years if remediation goals are not achieved.

7.1: Description of Remedial Alternatives

The following alternatives were considered to address the contaminated media identified at the site as describe in Section 5:

Alternative 1: No Further Action

The No Further Action Alternative recognizes the remediation of the site completed by the IRM(s) described in Section 5.2. This alternative leaves the site in its present condition and does not provide any additional protection of the environment.

Alternative 2: Site Management without Groundwater Monitoring

Alternative 2 consists of operation, maintenance and monitoring of the existing SSD systems, and continued soil vapor intrusion monitoring of the one designated home. An environmental easement would be used to certify continued operation and maintenance of the SSD systems.

Present Worth: *$54,000*
Capital Cost: *$15,000*
Annual Costs: *$2,520*

Alternative 3: Site Management with Groundwater Monitoring, Soil Vapor Intrusion Sampling and Mitigation, and Institutional and Engineering Controls

In addition to the components of Alternative 2, Alternative 3 would consist of the following: conducting soil vapor intrusion sampling at the previously unoccupied building adjacent to the Campagnolo Property and potential mitigation of the sampled building; an environmental easement for the restriction of land use to commercial/industrial and the prohibition of groundwater use; and groundwater monitoring to assess the apparent degradation of contaminants.

The groundwater monitoring would include periodic sampling of the three existing monitoring wells designated as CP-MW-01S, CP-MW-03S, and CP-MW-05S (Figure 3) for analysis of VOCs and indicator parameters.

Present Worth: *$146,000*
Capital Cost: *$30,000*
Annual Costs: *$7,550*

7.2 Evaluation of Remedial Alternatives

The criteria to which potential remedial alternatives are compared are defined in 6 NYCRR Part 375, which sets forth the requirements for the remediation of inactive hazardous waste disposal sites in New York. A detailed discussion of the evaluation criteria and comparative analysis is included in feasibility study.

The first two evaluation criteria are termed "threshold criteria" and must be satisfied in order for an alternative to be considered for selection.

1. Protection of Human Health and the Environment. This criterion is an overall evaluation of each alternative's ability to protect public health and the environment.

2. Compliance with New York State Standards, Criteria, and Guidance (SCGs). Compliance with SCGs addresses whether a remedy will meet environmental laws, regulations, and other standards and criteria. In addition, this criterion includes the consideration of guidance which the Department has determined to be applicable on a case-specific basis.

The next six "primary balancing criteria" are used to compare the positive and negative aspects of each of the remedial strategies.

3. Long-term Effectiveness and Permanence. This criterion evaluates the long-term effectiveness of the remedial alternatives after implementation. If wastes or treated residuals remain on-site after the selected remedy has been implemented, the following items are evaluated: 1) the magnitude of the remaining risks, 2) the adequacy of the engineering and/or institutional controls intended to limit the risk, and 3) the reliability of these controls.

4. Reduction of Toxicity, Mobility or Volume. Preference is given to alternatives that permanently and significantly reduce the toxicity, mobility or volume of the wastes at the site.

5. Short-term Impacts and Effectiveness. The potential short-term adverse impacts of the remedial action upon the community, the workers, and the environment during the construction and/or implementation are evaluated. The

length of time needed to achieve the remedial objectives is also estimated and compared against the other alternatives.

6. Implementability. The technical and administrative feasibility of implementing each alternative are evaluated. Technical feasibility includes the difficulties associated with the construction of the remedy and the ability to monitor its effectiveness. For administrative feasibility, the availability of the necessary personnel and materials is evaluated along with potential difficulties in obtaining specific operating approvals, access for construction, institutional controls, and so forth.

7. Cost-Effectiveness. Capital costs and annual operation, maintenance, and monitoring costs are estimated for each alternative and compared on a present worth basis. Although cost-effectiveness is the last balancing criterion evaluated, where two or more alternatives have met the requirements of the other criteria, it can be used as the basis for the final decision. The costs for each alternative are presented in the Remedial Alternatives Cost Table 2.

Table 2
Remedial Alternative Costs

Remedial Alternative	Capital Cost ($)	Annual Costs ($)	Total Present Worth ($)
No Further Action (Alternative 1)	0	0	0
Alternative 2	15,000	2,520	54,000
Alternative 3	30,000	7,550	146,000

8. Land Use. When cleanup to pre-disposal conditions is determined to be infeasible, the Department may consider the current, intended, and reasonable anticipated future land use of the site and its surroundings in the selection of the soil remedy.

The final criterion, Community Acceptance, is considered a “modifying criterion” and is taken into account after evaluating those above. It is evaluated after public comments on the Proposed Remedial Action Plan have been received.

9. Community Acceptance. Concerns of the community regarding the investigation, the evaluation of alternatives, and the PRAP are evaluated. A responsiveness summary will be prepared that describes public comments received and the manner in which the Department will address the concerns raised. If the selected remedy differs significantly from the proposed remedy, notices to the public will be issued describing the differences and reasons for the changes.

SECTION 8: SUMMARY OF THE PROPOSED REMEDY

The Department is proposing Alternative 3, Site Management with Groundwater Monitoring, Soil Vapor Intrusion Sampling and Mitigation, and Institutional and Engineering Controls as the remedy for this site. The elements of this remedy are described at the end of this section.

8.1 Basis for Selection

The proposed remedy is based on the results of the RI and the evaluation of alternatives.

Alternative 3 is being proposed because, as described below, it satisfies the threshold criteria and provides the best balance of the balancing criterion described in Section 7.2. It would achieve the remediation goals for the site by continued operation of SSD systems, soil vapor intrusion sampling and mitigation, confirming the apparent degradation of contaminants in groundwater, and imposition of land use and groundwater use restrictions.

Alternative 1 (No Further Action) does not provide any protection to public health and the environment and Alternative 2 does not provide sufficient protection to public health since it lacks controls on future land use. Neither of these alternatives will be evaluated further.

Alternative 3, with the elements of groundwater monitoring, soil vapor intrusion sampling and mitigation, and institutional and engineering controls, is protective of public health and the environment. Alternative 3 also provides reasonable long-term effectiveness and allows measuring for compliance with SCGs and the remedial goals and objectives for the site. Overall, the satisfaction of these criteria by Alternative 3 was particularly important in selecting the final remedy for this site.

The estimated present worth cost to implement the remedy is $146,000. The cost to establish the remedy is estimated to be $30,000 and the estimated average annual costs for 30 years is $7,550.

8.2 Elements of the Proposed Remedy

The elements of the proposed restricted use remedy are as follows:

1. A remedial design program would be implemented to provide the details necessary for the construction, operation, maintenance, and monitoring of the remedial program. The remedial design program would include mitigation of any soil vapor intrusion impacts identified at the previously unoccupied building adjacent to the Campagnolo Property.

2. Operation, maintenance and monitoring of existing sub-slab depressurization systems.

3. The operation of the components of the remedy would continue until the remedial objectives have been achieved, or until the Department determines that continued operation is technically impracticable or not feasible.

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

(a) requires the remedial party or site owner to complete and submit to the Department a periodic certification of institutional and engineering controls in accordance with Part 375-1.8 (h)(3).
(b) land use is subject to local zoning laws, the remedy allows the use and development of the controlled property for
☐ residential use ☐ restricted residential use ☒ commercial use ☒ industrial use
(c) restricts the use of groundwater as a source of potable or process water, without necessary water quality treatment as determined by the Department, NYSDOH or County DOH;
(d) requires compliance with the Department approved Site Management Plan;

5. Since the remedy results in contamination remaining at the site that does not allow for unrestricted use, a Site Management Plan is required, which includes the following:

(a) an Institutional and Engineering Control Plan that identifies all use restrictions and engineering controls for the site and details the steps and media-specific requirements necessary to assure the following institutional and/or engineering controls remain in place and effective:

Institutional Controls: The Environmental Easement discussed in Paragraph 4 above.

Engineering Controls: The sub-slab depressurization systems discussed in Paragraph 2 above.

This plan includes, but may not be limited to:

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

(b) a Monitoring Plan to assess the performance and effectiveness of the remedy. The plan includes, but not be limited to:

(i) monitoring of groundwater to assess the apparent degradation of contaminants;
(ii) a schedule of monitoring and frequency of submittals to the Department;
(iii) provision to evaluate the potential for vapor intrusion for any buildings developed on the site, including provision for mitigation of any impacts identified;
(iv) provision to evaluate the potential for soil vapor intrusion for existing buildings if building use changes significantly or if a vacant building become occupied.
(v) provision to evaluate the potential for soil vapor intrusion for the one off-site home where monitoring has been recommended to continue on a periodic basis.

(c) an Excavation Management Plan which describes management of soil and other media in the event of excavations in potentially contaminated portions of the site.

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CAMPAGNOLO PROPERTY
SITE PLAN

FIGURE 1

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CP-GS-17	SCGs	8/07
VOCs:		
1,2-Dichloroethene (cis)	5	ND
Tetrachloroethene	5	0.12
Trichloroethene	5	ND
Vinyl chloride	2	ND

CP-GS-18	SCGs	8/07
VOCs:		
1,2-Dichloroethene (cis)	5	ND
Tetrachloroethene	5	0.2
Trichloroethene	5	ND
Vinyl chloride	2	ND

CP-MW-03S	SCGs	9/07	1/08
VOCs:			
1,2-Dichloroethene (cis)	5	ND	ND
Tetrachloroethene	5	1.71	1.04
Trichloroethene	5	ND	ND
Vinyl chloride	2	ND	ND

CP-MW-01S	SCGs	9/07	1/08
VOCs:			
1,2-Dichloroethene (cis)	5	39	25.1
Tetrachloroethene	5	5.45	9.23
Trichloroethene	5	2.44	3.75
Vinyl chloride	2	6.06	0.88

CP-GS-15	SCGs	8/07
VOCs:		
1,2-Dichloroethene (cis)	5	ND
Tetrachloroethene	5	0.27
Trichloroethene	5	ND
Vinyl chloride	2	ND

CP-GS-13	SCGs	8/07
VOCs:		
1,2-Dichloroethene (cis)	5	1.59
Tetrachloroethene	5	ND
Trichloroethene	5	ND
Vinyl chloride	2	1.06

CP-GS-12	SCGs	8/07
VOCs:		
1,2-Dichloroethene (cis)	5	64.3
Tetrachloroethene	5	1.04
Trichloroethene	5	0.36
Vinyl chloride	2	37.3

CP-GS-10	SCGs	8/07
VOCs:		
1,2-Dichloroethene (cis)	5	1.56
Tetrachloroethene	5	ND
Trichloroethene	5	ND
Vinyl chloride	2	28.9

CP-GS-09	SCGs	8/07
VOCs:		
1,2-Dichloroethene (cis)	5	16.6
Tetrachloroethene	5	31.9
Trichloroethene	5	6.56
Vinyl chloride	2	0.63

CP-GS-06	SCGs	8/07
VOCs:		
1,2-Dichloroethene (cis)	5	2.02
Tetrachloroethene	5	ND
Trichloroethene	5	ND
Vinyl chloride	2	6.53

CP-MW-05S	SCGs	9/07	1/08
VOCs:			
1,2-Dichloroethene (cis)	5	207	95.7
Tetrachloroethene	5	6.01	10.1
Trichloroethene	5	2.96	3.85
Vinyl chloride	2	15.8	7.85

CP-GS-01	SCGs	8/07
VOCs:		
1,2-Dichloroethene (cis)	5	0.6
Tetrachloroethene	5	ND
Trichloroethene	5	ND
Vinyl chloride	2	ND

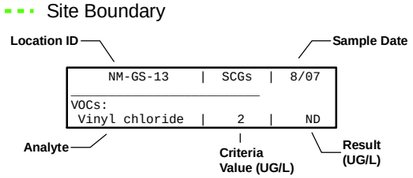
CP-GS-16
CP-GS-11
CP-MW-02D
CP-MW-02S
CP-GS-08
CP-GS-14
CP-MW-04S
CP-GS-07
CP-GS-05
CP-GS-03
CP-GS-04
CP-GS-02
MW-22S
MW-22D

CASCADILLA ST
ESTY ST
W COURT ST
OLD TAUGHANNOCK BLVD
MORRIS AVE
5TH ST
3RD ST
MONROE ST
N PLAIN ST
N MEADOW ST
WASHINGTON ST
PARK PL

Legend

PCE and Breakdown Product Total:

- No Compounds Detected
- Compounds Detected < SCGs
- Compounds Exceed SCGs
- Site Boundary



Criteria: NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations, June 1998 (including April 2000 and June 2004 addenda), Class GA.

200 100 0 200
Feet

CAMPAGNOLO PROPERTY
GROUNDWATER ANALYTICAL RESULTS

URS

FIGURE 2

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Legend

- No Compounds Detected
- No Compounds Exceed Criteria
- At Least One Compound Exceeds Criteria
- Site Boundary

Location ID: CP-MW-02D

Criteria: 6 NYCRR Part 375.6: Remedial Program Soil Cleanup Objectives, December 14, 2006; Table 375-6.8(a), Unrestricted Use.

0 50 100 200 Feet

URS

CAMPAGNOLO PROPERTY SITE
REMEDIAL INVESTIGATION
SOIL ANALYTICAL RESULTS EXCEEDING SOIL CRITERIA

FIGURE 3

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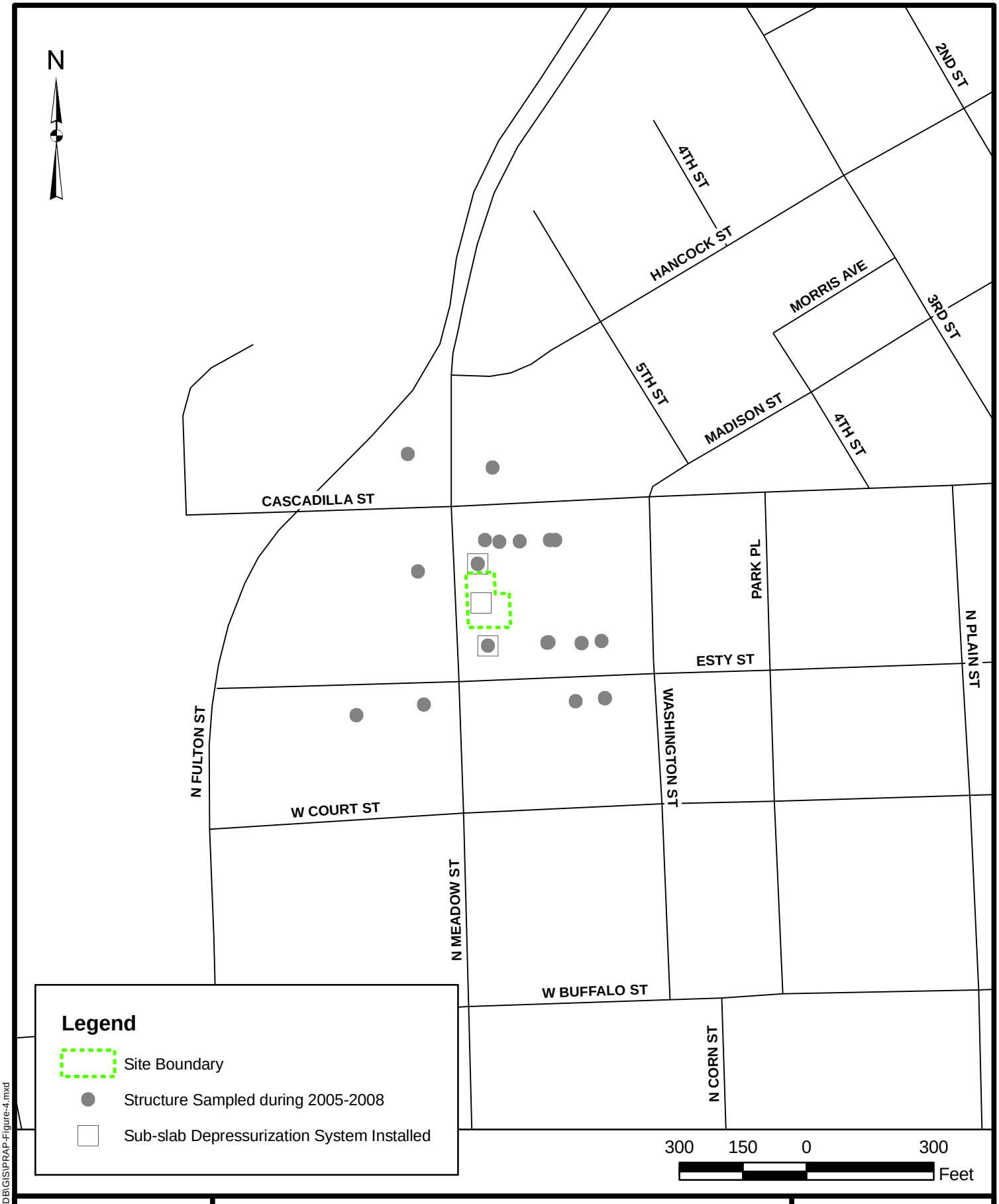

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URS

CAMPAGNOLO SITE
VAPOR INTRUSION SAMPLING

FIGURE 4