Department of Environmental Conservation

Division of Environmental Remediation

Record of Decision

Utility Manufacturing/Wonder King Site
Operable Unit No. 1 - On-Site Contamination
Town of North Hempstead, Nassau County
New York
Site Number 1-30-043H

March 2003

New York State Department of Environmental Conservation
GEORGE E. PATAKI, *Governor* ERIN M. CROTTY, *Commissioner*

DECLARATION STATEMENT - RECORD OF DECISION

Utility Manufacturing/Wonder King
Inactive Hazardous Waste Disposal Site
Operable Unit No. 1 - On-Site Contamination
Town of North Hempstead, Nassau County, New York
Site No. 1-30-043H

Statement of Purpose and Basis

The Record of Decision (ROD) presents the selected remedy for Operable Unit 1 of the Utility Manufacturing/Wonder King 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 Operable Unit 1 of the Utility Manufacturing/Wonder King 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 measure (IRM) identified in this ROD. The removal of contamination from on-site groundwater has significantly reduced the threat to public health and the environment. Therefore, the IRM will continue to operate and a groundwater monitoring program will be implemented to monitor the effectiveness of remedial actions in preventing further contamination of the groundwater.

Description of Selected Remedy

Based on the results of the Remedial Investigation and Feasibility Study (RI/FS) for the Utility Manufacturing/Wonder King site and the criteria identified for evaluation of alternatives, the NYSDEC has selected No Further Action with continued operation of the air sparge/soil vapor extraction (AS/SVE) system. The components of the remedy are as follows:

1. Continued operation and maintenance of four existing SVE wells and two existing AS wells.

2. Continued operation and maintenance of the existing physical plant for the AS/SVE system. This equipment includes, but is not limited to, a blower, compressor, moisture separator, two activated carbon vessels, and associated valves, gauges, and piping.

3. Quarterly monitoring of eight on-site monitoring wells (MW-2 through the MW-7 triplet) and one upgradient monitoring well (MW-1).

4. Institutional controls in the form of existing use and development restrictions preventing the use of groundwater as a source of potable or process water without necessary water quality treatment as determined by the Nassau County Department of Health.

5. 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 technically impracticable or not feasible.

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.

_____ _____

Date

Dale A. Desnoyers, Director
Division of Environmental Remediation

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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), has selected a remedy for the on-site contamination at the Utility Manufacturing/Wonder King ("Utility") site. The on-site contamination has been designated Operable Unit 1 (OU1). Off-site groundwater contamination, designated Operable Unit 2 (OU2), will be addressed in a subsequent Record of Decision (ROD). As more fully described in Sections 3 and 5 of this document, discharges into underground cesspools and dry wells resulted in the disposal of hazardous wastes, including volatile organic compounds (VOCs). These wastes contaminated the groundwater at the site. These disposal activities resulted in:

- a significant threat to human health associated with this site's contravention of groundwater standards in a sole source aquifer.

- a significant environmental threat associated with the impacts of contaminants to a sole source aquifer.

The contaminated groundwater from the Utility site and within the entire New Cassel Industrial Area (NCIA) presents a potential route of exposure to humans. The Bowling Green Water District provides public water to the area. Supply wells for this water district are located downgradient of the NCIA and these wells have been impacted by site-related contamination. In 1996, an air stripping treatment system was constructed to treat the water supply wells. The Bowling Green Water District system is routinely monitored for compliance with NYSDOH Drinking Water Standards. Monitoring wells have been installed upgradient of the water supply wells as a precautionary measure. Therefore, use of the groundwater in the area is not currently considered an exposure pathway of concern.

Currently, there are thirteen (13) Class 2 sites in the NCIA. A Class 2 site is a site at which hazardous waste constitutes a significant threat to the public health or the environment and action is required. The NYSDEC has been using a three-prong strategy in remediating Class 2 sites in the NCIA. The first action identifies source areas at each site which will be remediated or removed; the second action includes the investigation and remediation of groundwater contamination at and beneath each site; and the third action is the ongoing effort by the NYSDEC which includes a detailed investigation of groundwater contamination that is migrating off-site from all Class 2 sites within the NCIA. The first phase of this comprehensive groundwater investigation has been

completed, and a Remedial Investigation (RI) report has been prepared. Additional monitoring wells were installed in the fall of 2001 and June 2002.

During the course of the investigation a certain action, known as an interim remedial measure (IRM), was undertaken at the Utility 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 IRM undertaken at this site included air sparging and soil vapor extraction (AS/SVE) to remediate contaminated groundwater. The IRM only addressed on-site contamination.

Based on the success of the above IRM, the findings of the investigation indicate that the on-site contamination no longer poses a significant threat to human health or the environment, therefore No Further Action with continued operation of the AS/SVE system was selected as the remedy for on-site contamination.

The selected remedy, discussed in detail in Section 6, is intended to attain the remediation goals identified for this site in Section 6. The remedy must conform with applicable (or relevant and appropriate) standards and criteria with consideration given to guidance, as appropriate. This term is hereafter called SCGs.

SECTION 2: SITE LOCATION AND DESCRIPTION

The Utility site, No. 1-30-043 H, is located at 700 Main Street. The site is situated on the south side of Main Street, approximately 500 feet north of Old Country Road in the NCIA. The NCIA is a 170-acre industrial and commercial area in the Town of North Hempstead, Nassau County. Currently thirteen (13) Class 2 sites exist in the NCIA. Figures 1 and 2 show the locations of the NCIA and the Class 2 sites within the NCIA.

A two-story industrial building occupies most of the site. The remainder of the site is paved. The site is owned by Nest Equities Inc. and is occupied by the Utility Manufacturing Company. The Utility Manufacturing Company blends and repackages materials. Refer to Figure 3 for a site map. Please note that although Figures 3 through 8 bear a CA Rich Consultants title block, the NYSDEC has modified these figures from their original form.

The Former Applied Fluidics site, No. 1-30-043M is located approximately 750 feet east of the Utility site. The 89 Frost Street site, No. 1-30-043L, and the Former Autoline Automotive site, No. 1-30-043I, are adjacent to the Former Applied Fluidics site. All three of these sites are Class 2 sites.

The NCIA is highly developed and no significant surface water sources exist near the Utility site. The nearest surface waters are small ponds within the Eisenhower Memorial Park located about two miles southwest of the site.

OU1, which is the subject of this PRAP, consists of on-site contamination. 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 for this site is: off-site groundwater contamination (OU2).

SECTION 3: SITE HISTORY

3.1: Operational/Disposal History

Utility Manufacturing is an active facility that blends and repackages materials, including tetrachloroethylene (PCE). This company has operated since 1976 and processes several thousand pounds of PCE each year. For example, Utility's annual PCE purchases from 1990-1994 ranged from 23,600-45,760 pounds. Utility stated in a December 26, 2002 letter that they currently repackage approximately 4,000 pounds of PCE each year. In 1971, two 550-gallon above ground storage tanks were installed inside the building. Utility has stored PCE in these tanks since occupying the facility.

3.2: Remedial History

The NYSDEC has identified the site as a Class 2 site in the Registry of Inactive Hazardous Waste Disposal Sites in New York. 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.

In 1986 the Nassau County Department of Health (NCDOH) completed an investigation of groundwater quality and found the NCIA to be a major source of volatile organic compound (VOC) contamination in groundwater. As a result of this investigation the NYSDEC classified the entire NCIA as a Class 2 site in August 1988.

In 1988, several dry wells and cesspools were sampled at the Utility site by Utility Manufacturing's consultant. Sampling results indicated that these drainage structures were contaminated with PCE and other VOCs. In 1989, Utility Manufacturing pumped out and power washed the drainage structures. The remediation was overseen by the NCDOH. Endpoint sampling results met soil cleanup objectives. In 1989, the facility was connected to the municipal sewer.

In February 1995, the NYSDEC's consultant completed a site investigation report for the NCIA under the New York State Superfund program. Based on this report, the NYSDEC removed the NCIA from the Registry in March 1995. At the same time, five sites within the NCIA (not including the Utility site) were added to the Registry as individual Class 2 sites.

In 1996, the NYSDEC's consultant issued a Preliminary Site Assessment (PSA) for several properties in the NCIA. Groundwater sampling results from the PSA showed PCE concentrations downgradient of the Utility site an order of magnitude greater than upgradient concentrations. The site was added to the Registry as a Class 2 in 1996.

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 Utility Manufacturing Company entered into a Consent Order in September 1997. The Order obligates the responsible parties to implement a RI/FS remedial program. Upon issuance of the ROD the NYSDEC will expect 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 RI was conducted between November 1997 and December 2000**.** The field activities and findings of the investigation are described in the January 1999, August 1999 and December 2000 RI reports entitled "Phase One Field Investigation Report, Focused Remedial Investigation", "Focused Remedial Investigation Soil Report" and "On-Site Groundwater Investigation", respectively.

The RI reports only addressed on-site contamination (OU1). An off-site groundwater investigation will be conducted prior to issuing a PRAP for off-site groundwater contamination (OU2).

The following activities were conducted during the RI:

- Research of historical information
- Installation of four soil borings and four monitoring wells for analysis of soils and groundwater as well as physical properties of soil and hydrogeologic conditions
- Sampling of six new and existing monitoring wells
- Collection of nine discrete groundwater samples using a direct push technique

To determine whether the soil and groundwater 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 Part 5 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".

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 below. More complete information can be found in the RI report.

5.1.1: Site Geology and Hydrogeology

The entire Utility site is covered with either the building or pavement. Beneath the site are two water bearing layers, the Upper Glacial Aquifer (UGA) and the Magothy Aquifer. The deposits that make up the UGA are found from the surface to a depth of approximately 80 feet below ground surface (bgs). The UGA is an unconfined aquifer consisting of poorly sorted sands and gravels. However, one clay lense was found in the UGA beneath the Utility site at approximately 40 feet bgs. The underlying Magothy Aquifer consists of finer sands, silts and small amounts of clay.

Usually, the upper surface of the Magothy formation is found at least 100 feet bgs. However, based on observations during well installation for this investigation, the Magothy is found in the NCIA at significantly shallower depths (60-87 feet bgs) than in many other areas of Long Island. Similarly, the UGA and the Magothy are usually separated by a clay aquitard but in this area the UGA and the Magothy are in direct hydraulic connection. Depth to groundwater is about 60 feet bgs in the area of the site and groundwater flows in a southwesterly direction. Both the UGA and Magothy have been designated as sole source aquifers and are protected under state and federal legislation.

5.1.2: Nature of Contamination

As described in the RI reports, many soil and groundwater samples were collected to characterize the nature and extent of contamination. As summarized in Table 1, the main categories of contaminants that exceed their SCGs are volatile organic compounds (VOCs) and semivolatile organic compounds (SVOCs).

The VOCs of concern are PCE, trichloroethene (TCE), dichloroethene (DCE) and trichloroethane (TCA).

The SVOCs of concern are benzo(a)anthracene and benzo(a)pyrene.

5.1.3: Extent of Contamination

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

Chemical concentrations are reported in parts per billion (ppb) for water samples and parts per million (ppm) for soil samples. For comparison purposes, where applicable, SCGs are provided for each medium.

Table 1 summarizes the degree of contamination for the contaminants of concern in soil and groundwater 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

Four soil borings (SB-1 to SB-4) were completed during the RI. In SB-2 (5-7 feet bgs), two SVOCs exceeded SCGs. Benzo(a)anthracene (0.233 ppm) and benzo(a)pyrene (0.169 ppm) exceeded their SCGs of 0.224 ppm and 0.061 ppm, respectively. No other soil samples had compounds exceeding SCGs.

Although benzo(a)anthracene and benzo(a)pyrene marginally exceeded SCGs in subsurface soil, no SVOCs exceeded SCGs in groundwater. Also, the site is paved, which inhibits leaching of contaminants from the soil into the groundwater. Therefore, SVOCs at this site are not a significant threat to human health or the environment.

PCE was detected in SB-4 (1-3 feet bgs) at 0.0822 ppm and SB-1 (33-35 feet bgs) at 0.0067 ppm. TCE was detected in SB-4 (13-15 feet bgs) at 0.0201ppm. Although PCE and TCE concentrations did not exceed SCGs of 1.4 ppm and 0.7 ppm, respectively, these compounds are not naturally occurring and are therefore indicative of past disposal at the site. As discussed below, these VOCs were also detected in the groundwater at the site. Neither PCE nor TCE were detected in SB-3. Refer to Figure 4 for soil sampling results.

Groundwater

Four monitoring wells (MW-1 to MW-3 and MW-5) that were screened at the water table (approximately 60 feet bgs) were sampled during the RI. On-site PCE concentrations ranged from 142-846 ppb, exceeding the SCG of 5 ppb. The upgradient well (MW-1) had a PCE level of 12.2 ppb. Total on-site VOC concentrations ranged from 150 ppb to 1,019 ppb, exceeding the upgradient VOC level of 15.6 ppb. The other VOCs that exceeded SCGs were TCA (maximum 24.4 ppb) and breakdown products of PCE, including TCE and DCE. TCE concentrations ranged from non-detect to 69.9 ppb in the water table wells, while DCE concentrations ranged from non-detect to 46 ppb. The SCG for TCE and DCE is 5 ppb.

Two additional on-site monitoring wells (MW-4 and MW-6) were sampled during the RI. MW-4 is screened at 40 feet bgs to sample the perched water table above a clay layer. This well had PCE, TCE, and DCE at levels of 118 ppb, 52 ppb, and 66 ppb, respectively. Total VOC levels in MW-4 were 236 ppb. MW-6 was installed at 95 feet bgs and had a PCE concentration of 93 ppb. Total VOC levels in MW-6 were 114 ppb. Monitoring well sampling results are depicted in Figure 5.

Nine on-site groundwater samples from three borings (B6 to B8) were obtained using the direct push method. PCE concentrations ranged from 71-530 ppb. Total VOC concentrations ranged from 80-617 ppb. Direct push sampling results are shown in Figure 6.

No groundwater samples were obtained downgradient of the Utility site as part of the RI. Additional investigation is needed to determine the extent of off-site groundwater contamination. Following the off-site investigation, a PRAP for OU2 (off-site groundwater contamination) will be issued.

In November 2001, an IRM consisting of air sparging and soil vapor extraction (AS/SVE) was installed to remediate the on-site groundwater. Three additional monitoring wells (MW-7S, 7I and

7D) were installed at the downgradient edge of the property to monitor the AS/SVE system. See Section 5.2 for a description of the IRM.

After the IRM installation, the monitoring wells were sampled on a quarterly basis. During the most recent sampling event in September 2002, the highest PCE concentration was 26 ppb at MW-3. MW-3 also had the highest total VOC concentration of 48 ppb. To date, the maximum total VOC concentrations have decreased from 1,019 ppb to 48 ppb. Refer to Figure 7 for September 2002 monitoring data.

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 air sparge/soil vapor extraction (AS/SVE) system was installed in November 2001 to remediate on-site contaminated groundwater. AS/SVE is a combination of two technologies. AS injects air into the groundwater below the contaminated zone. This is accomplished by using a compressor, which injects air into the two AS wells. The AS wells are screened at 105 feet bgs. The injected air removes VOCs from contaminated groundwater. As the air rises through the contaminated groundwater and disperses radially, VOCs in the groundwater mix with the air and rise to the surface.

SVE applies a vacuum to the vadose zone (soil zone above the groundwater table) to capture the air and VOC mixture. A blower is used to create the vacuum. Two SVE wells are screened at 25 feet bgs and two wells are screened at 50 feet bgs. This arrangement insures a vacuum both above and beneath the clay layer, which is situated at 40 feet bgs. The air-vapor mixture is treated using vapor-phase carbon to remove VOCs prior to discharge to the atmosphere.

As stated in the previous section, maximum groundwater concentrations have decreased by two orders of magnitude since the AS/SVE system was installed. These results indicate that the system is remediating the groundwater contamination at the site. The locations and approximate radii of influence of the AS/SVE wells are shown in Figure 8. A process schematic is depicted in Figure 9.

5.3: Summary of Human Exposure Pathways:

This section describes the types of human exposures that may present added 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 of contaminant release 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 are documented. An exposure pathway is considered a potential pathway when one or more of the elements currently does not exist, but could in the future.

Pathways which are known to or may exist at the site include:

- Ingestion of contaminated groundwater.

The contaminated groundwater at the Utility site and within the entire NCIA represents a potential route of exposure to humans. The Bowling Green Water District provides public water to the area. Supply wells for this water district are located downgradient of the NCIA and these wells have been impacted by site-related contamination. In 1996, an air stripping treatment system was constructed to treat the water supply wells. The Bowling Green Water District system is routinely monitored for compliance with New York State Drinking Water Standards. No site related contaminants have been detected exceeding drinking water standards in the water distributed to the public. Monitoring wells have been installed up-gradient of the water supply wells as a precautionary measure to detect any migrating plumes that could impact the well field above the capacity of the treatment system. With these measures in place, the use of the groundwater in the area is not currently considered an exposure pathway of concern.

5.4: Summary of Environmental Impacts

This section summarizes the existing and potential future environmental impacts presented by the site. 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.

The following environmental exposure pathways and ecological risks have been identified:

- Site contamination has impacted the groundwater resource in the Upper Glacial and Magothy Aquifer. These aquifers are federally designated sole source aquifers.

Due to the density of commercial and industrial buildings in the NCIA, there are no significant sources of surface water in close proximity to the site. Virtually every open space in the industrial area has been covered by asphalt, concrete or buildings. As the industrial area is so highly developed no wildlife habitat exists in or near these sites. The nearest surface water sources are several small ponds in and around Eisenhower Memorial Park, approximately two miles southwest of the site across Old Country Road. Therefore, the potential for plants and animal species being exposed to site-related contaminants is highly unlikely.

SECTION 6: SUMMARY OF THE REMEDIAL GOALS AND 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 to persons at or around the site to VOCs in groundwater that could be used as a source for drinking water

- Groundwater that exceeds NYSDEC GA Ambient Water Quality Criteria

The NYSDEC believes that the IRM has accomplished these remediation goals for on-site contamination, provided that it continues to be operated and maintained in a manner consistent with the IRM Work Plan.

Based on the results of the investigations at the site, the IRM that has been performed, and the evaluation discussed below, the NYSDEC has selected No Further Action with continued operation of the AS/SVE system as the on-site remedy.

The basis for this selection is the NYSDEC's conclusion that No Further Action with continued operation of the AS/SVE system will be protective of human health and the environment and will meet all SCGs for on-site contamination. Overall protectiveness is achieved through meeting the remediation goals listed above. As the IRM has decreased the maximum total VOC levels in groundwater from 1,019 ppb to 48 ppb, significant progress toward achieving groundwater standards has been made in less than one year. The decrease in VOCs in groundwater is reducing the amount of contamination headed downgradient from the site toward the Bowling Green public water supply well.

The main SCGs applicable to this project are groundwater quality standards. The IRM, which has already significantly reduced the VOCs in groundwater, will continue until the remedial objectives have been achieved, or until the NYSDEC determines that continued operation is technically impracticable or not feasible.

Therefore, the NYSDEC has selected No Further Action with continued operation of the AS/SVE system as the final remedy for the on-site contamination. Off-site groundwater contamination (OU2) will be addressed as part of a separate ROD. The elements of the selected remedy include:

1. Continued operation and maintenance of four existing SVE wells and two existing AS wells.

2. Continued operation and maintenance of the existing physical plant for the AS/SVE system. This equipment includes, but is not limited to, a blower, compressor, moisture separator, two activated carbon vessels, and associated valves, gauges, and piping.

3. Quarterly monitoring of eight on-site monitoring wells (MW-2 through the MW-7 triplet) and one upgradient monitoring well (MW-1).

4. Institutional controls in the form of existing use and development restrictions preventing the use of groundwater as a source of potable or process water without necessary water quality treatment as determined by the Nassau County Department of Health.

5. 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 technically impracticable or not feasible.

SECTION 7: HIGHLIGHTS OF COMMUNITY PARTICIPATION

As part of the remedial investigation process, a number of Citizen Participation activities were undertaken to inform and educate the public about conditions at the site and the potential remedial alternatives. The following public participation activities were conducted for the site:

- Repositories for documents pertaining to the site were established.

- A public contact list, which included nearby property owners, elected officials, local media and other interested parties, was established.

- Public information meetings regarding the entire New Cassel Industrial Area were held in May 1995, January 1996, May 1996, October 1996, May 1997, December 1997, May 1998, December 1998, May 1999, September 1999, February 2000, May 2000, January 2001, December 2001, and December 2002.

- A Fact Sheet was mailed to the public contact list in November 2002 to update the public on the status of the site.

- A public meeting was held on December 12, 2002 to present and receive comment on the PRAP.

- A responsiveness summary (Appendix A) was prepared to address the comments received during the public comment period for the PRAP.

In general, the public comments received were supportive of the selected remedy.

TABLE 1
Nature and Extent of Contamination
RI Samples Obtained - April 1998 to October 2000
IRM Groundwater Monitoring Samples Obtained - September 2002

SUBSURFACE SOIL	Contaminants of Concern	Concentration Range Detected (ppm)[a]	SCG[b] (ppm)[a]	Frequency of Exceeding SCG
Volatile Organic Compounds (VOCs)	cis-1,2-Dichloroethene	ND[c] to 0.0043	0.3	0 of 11
	Trichloroethene	ND to 0.0201	0.7	0 of 11
	Toluene	ND to 0.0033	1.5	0 of 11
	Tetrachloroethene	ND to 0.0822	1.4	0 of 11
	xylene	ND to 0.0409	1.2	0 of 11
Semivolatile Organic Compounds (SVOCs)	Naphthalene	ND to 0.0054	13	0 of 11
	Fluorine	ND to 0.109	50	0 of 11
	Phenanthrene	ND to 0.499	50	0 of 11
	Anthracene	ND to 0.175	50	0 of 11
	Flouranthene	ND to 0.615	50	0 of 11
	Pyrene	ND to 0.479	50	0 of 11
	Benzo(a)anthracene	ND to 0.233	0.224	1 of 11
	Chrysene	ND to 0.201	0.4	0 of 11
	bis(2-Ethylhexyl)phthalate	ND to 0.878	50	0 of 11
	Benzo(b)fluoranthene	ND to 0.205	1.1	0 of 11
	Benzo(a)pyrene	ND to 0.169	0.061	1 of 11
	Di-n-butylphthalate	ND to 0.130	8.1	0 of 11

TABLE 1 (Continued)
Nature and Extent of Contamination
RI Samples Obtained - April 1998 to October 2000
IRM Groundwater Monitoring Samples Obtained - September 2002

GROUNDWATER	Contaminants of Concern	Concentration Range Detected (ppb)[a]	SCG[b] (ppb)[a]	Frequency of Exceeding SCG
Volatile Organic Compounds (VOCs)	Tetrachloroethene	12.2 to 876	5	15 of 15
	Trichloroethene	ND to 69.6	5	12 of 15
	1,1-Dichloroethene	ND to 1.6	5	0 of 15
	1,2-Dichloroethene	ND to 66.2	5	11 of 15
	1,1,1-Trichloroethane	ND to 24.4	5	5 of 15
	1,1-Dichloroethane	ND to 1.5	5	0 of 15
	Acetone	ND to 2	50	0 of 15
Semivolatile Organic Compounds	Naphthalene	ND to 1.4	13	0 of 5

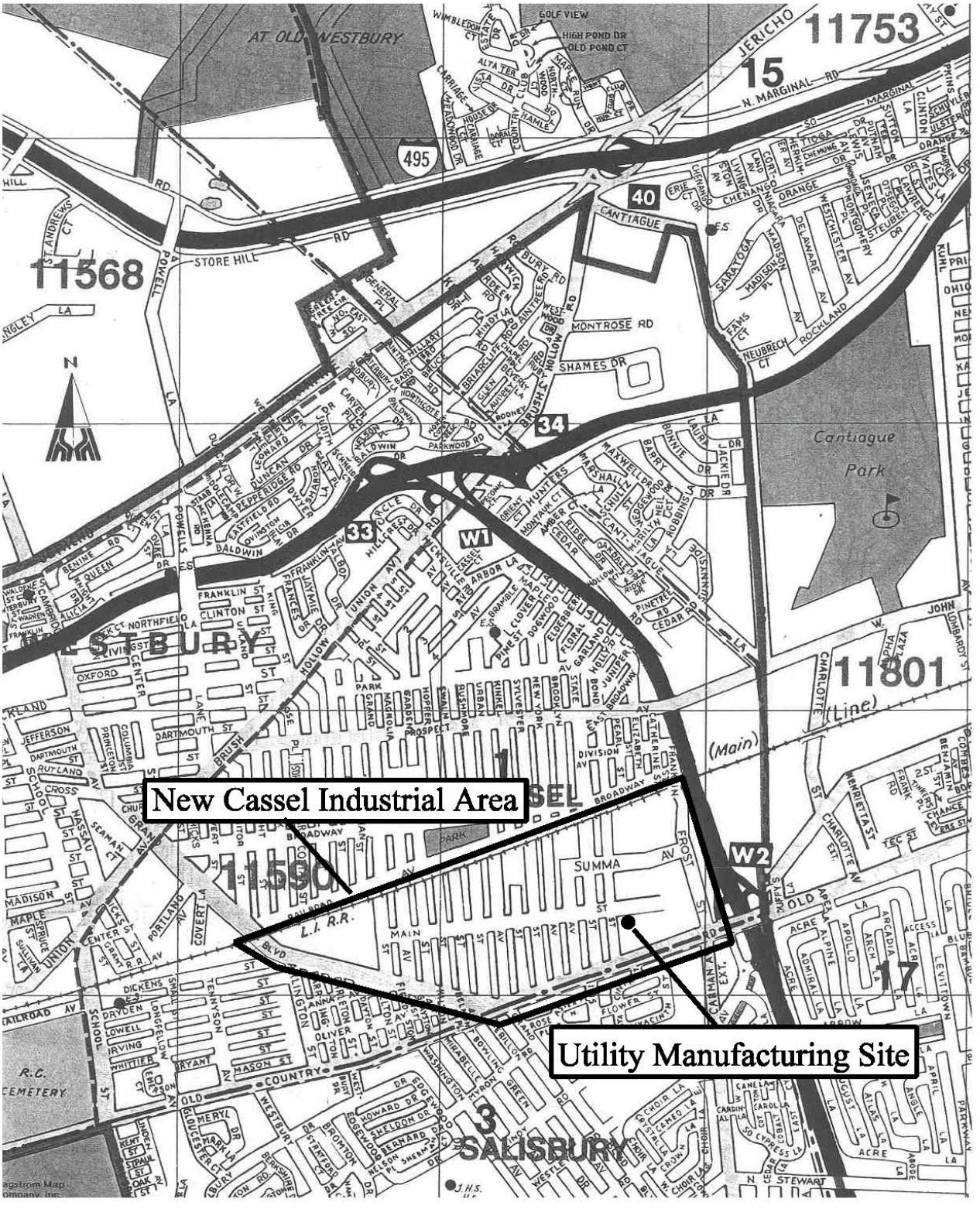
IRM GROUNDWATER MONITORING	Contaminants of Concern	Concentration Range Detected (ppb)[a]	SCG[b] (ppb)[a]	Frequency of Exceeding SCG
Volatile Organic Compounds (VOCs)	Tetrachloroethene	ND to 26	5	3 of 7
	Trichloroethene	ND to 1	5	0 of 7
	1,2-Dichloroethene	ND to 5	5	0 of 7
	1,1,1-Trichloroethane	ND to 3	5	0 of 7
	Carbon Disulfide	ND to 21	None	Not Applicable

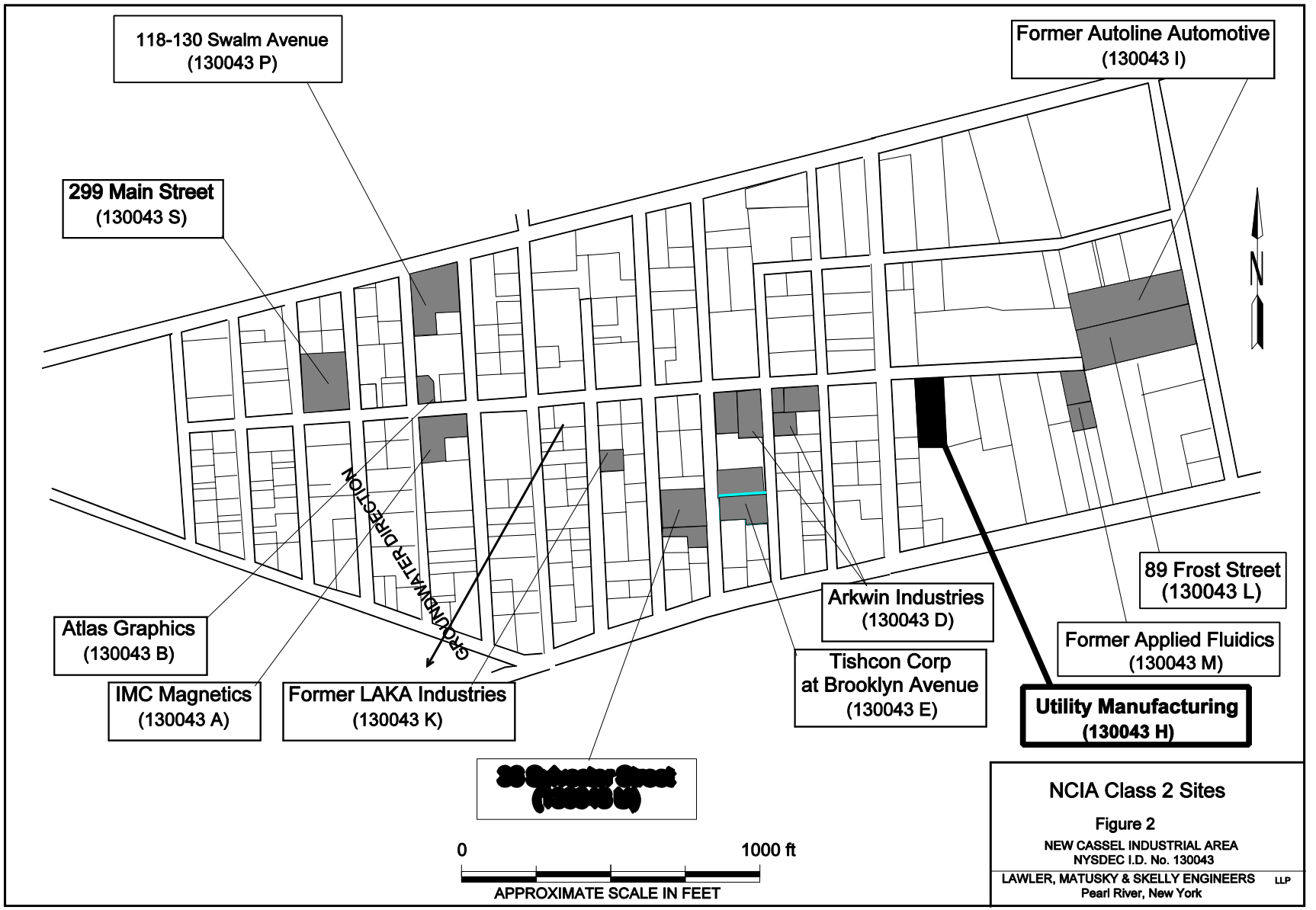
[a] ppb = parts per billion, which is equivalent to micrograms per liter, ug/L, in water;
ppm = parts per million, which is equivalent to milligrams per kilogram, mg/kg, in soil;

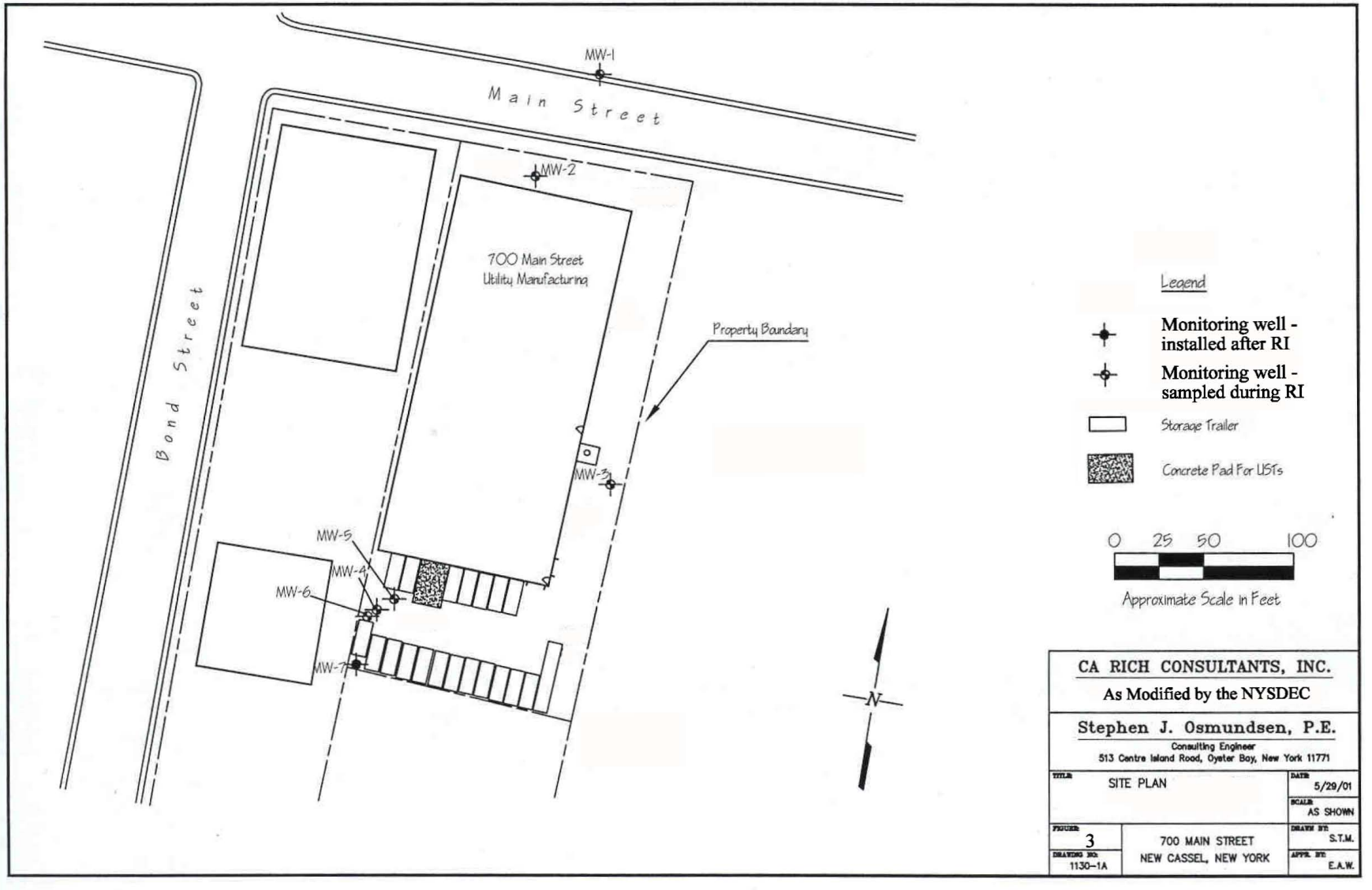
[b] SCG = standards, criteria, and guidance values; Soil SCGs are based on the NYSDEC "Technical and Administrative Guidance Memorandum (TAGM) 4046; Determination of Soil Cleanup Objectives and Cleanup Levels"; Groundwater SCGs are based on NYSDEC "Ambient Water Quality Standards and Guidance Values" and Part 5 of the New York State Sanitary Code;

[c] ND = non-detect

Figure 1 - Site Location Map




118-130 Swalm Avenue
(130043 P)
Former Autoline Automotive
(130043 I)
299 Main Street
(130043 S)
N
GROUNDWATER DIRECTION
89 Frost Street
(130043 L)
Arkwin Industries
(130043 D)
Atlas Graphics
(130043 B)
Former Applied Fluidics
(130043 M)
Tishcon Corp
at Brooklyn Avenue
(130043 E)
IMC Magnetics
(130043 A)
Former LAKA Industries
(130043 K)
Utility Manufacturing
(130043 H)
[redacted]
0
1000 ft
APPROXIMATE SCALE IN FEET
NCIA Class 2 Sites
Figure 2
NEW CASSEL INDUSTRIAL AREA
NYSDEC I.D. No. 130043
LAWLER, MATUSKY & SKELLY ENGINEERS LLP
Pearl River, New York



CA RICH CONSULTANTS, INC.

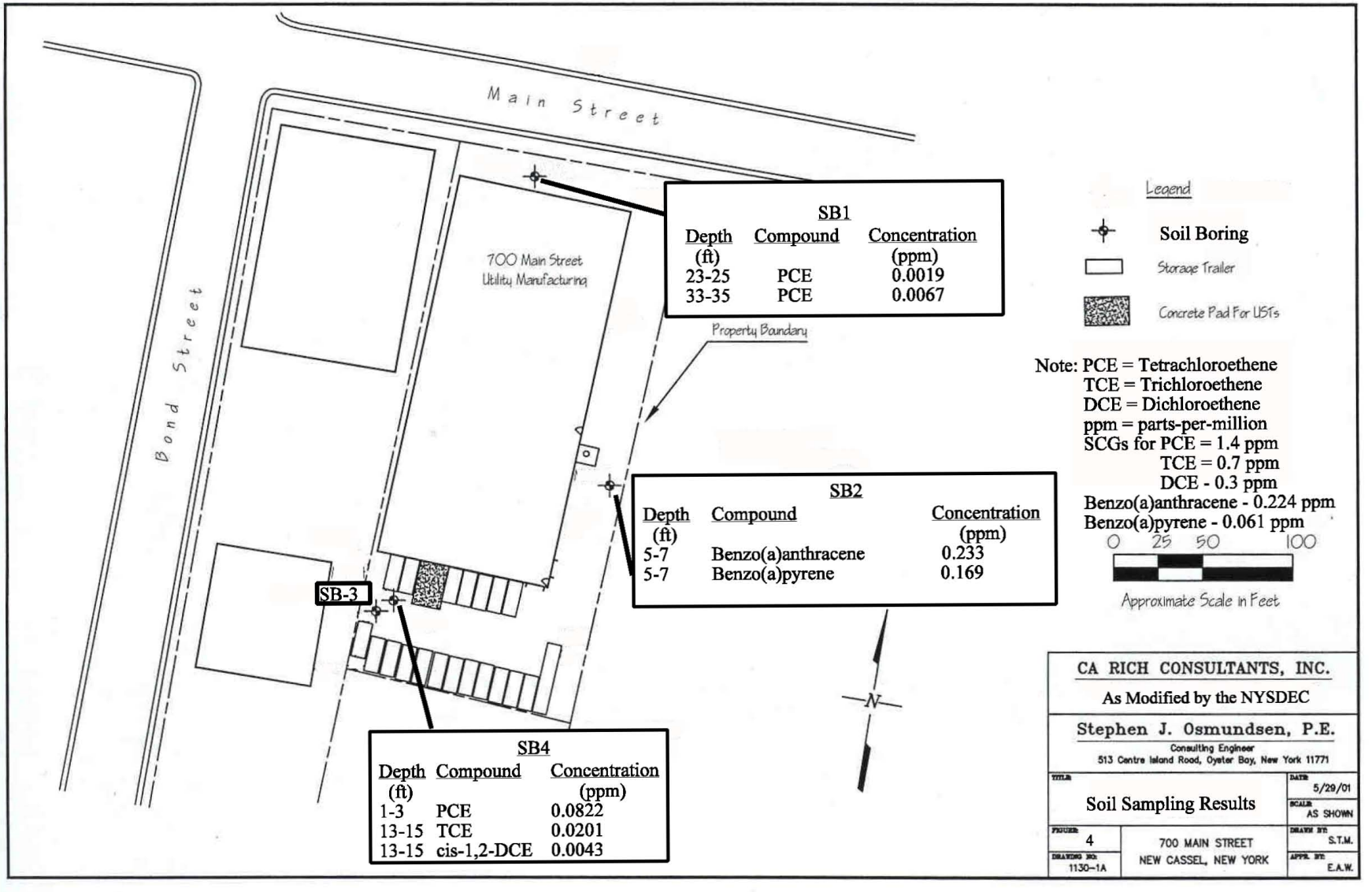
As Modified by the NYSDEC

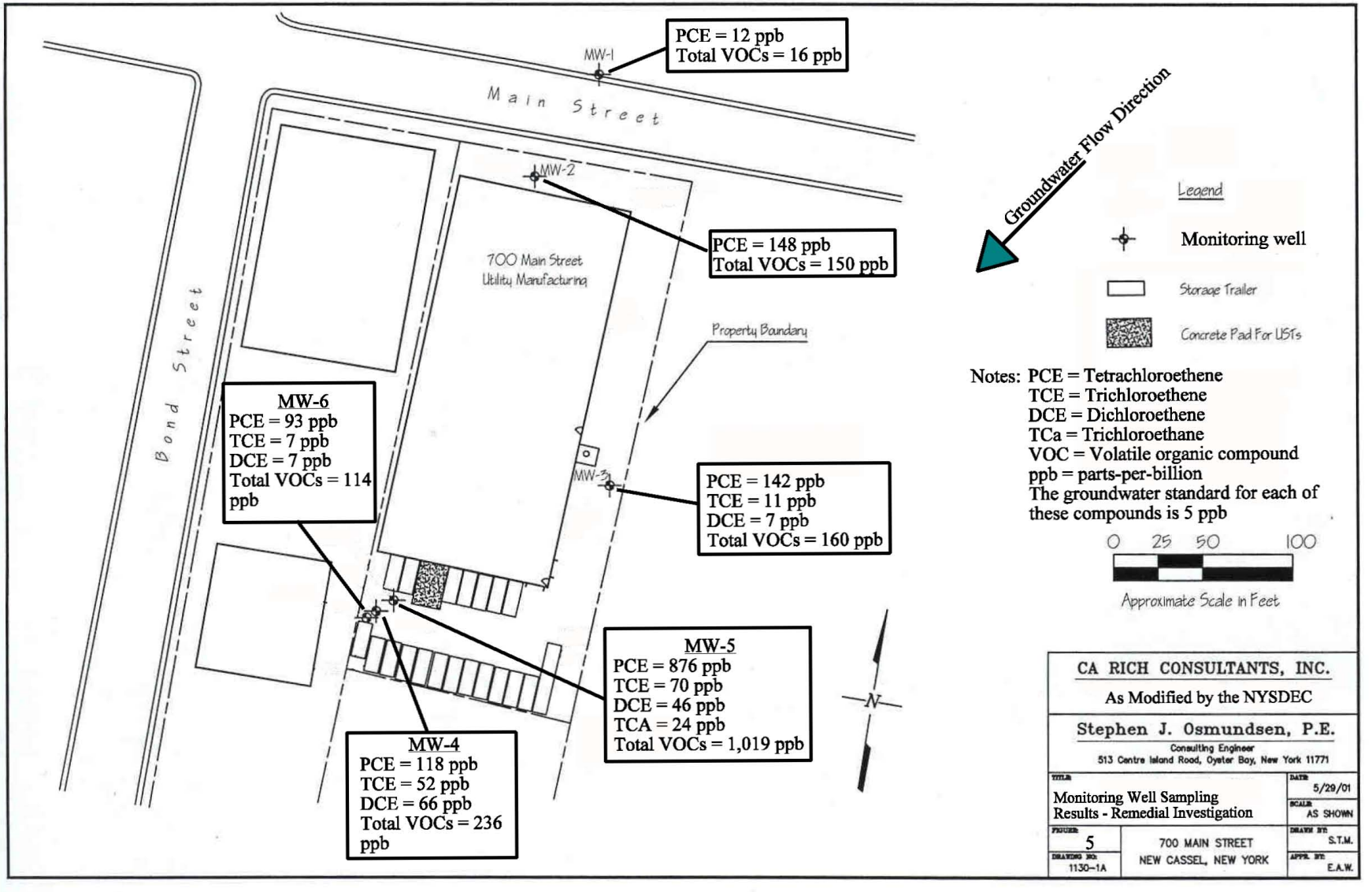
Stephen J. Osmundsen, P.E.

Consulting Engineer

513 Centre Island Road, Oyster Bay, New York 11771

TITLE: SITE PLAN		DATE: 5/29/01
		SCALE: AS SHOWN
FIGURE: 3	700 MAIN STREET NEW CASSEL, NEW YORK	DRAWN BY: S.T.M.
DRAWING NO.: 1130-1A		APPR. BY: E.A.W.


Main Street
Bond Street
700 Main Street
Utility Manufacturing
Property Boundary
SB-3
SB1
Depth (ft) | Compound | Concentration (ppm)
23-25 | PCE | 0.0019
33-35 | PCE | 0.0067
SB2
Depth (ft) | Compound | Concentration (ppm)
5-7 | Benzo(a)anthracene | 0.233
5-7 | Benzo(a)pyrene | 0.169
SB4
Depth (ft) | Compound | Concentration (ppm)
1-3 | PCE | 0.0822
13-15 | TCE | 0.0201
13-15 | cis-1,2-DCE | 0.0043
N
Legend
Soil Boring
Storage Trailer
Concrete Pad For USTs
Note: PCE = Tetrachloroethene
TCE = Trichloroethene
DCE = Dichloroethene
ppm = parts-per-million
SCGs for PCE = 1.4 ppm
TCE = 0.7 ppm
DCE - 0.3 ppm
Benzo(a)anthracene - 0.224 ppm
Benzo(a)pyrene - 0.061 ppm
0 25 50 100
Approximate Scale in Feet
CA RICH CONSULTANTS, INC.
As Modified by the NYSDEC
Stephen J. Osmundsen, P.E.
Consulting Engineer
513 Centre Island Road, Oyster Bay, New York 11771
TITLE: Soil Sampling Results
DATE: 5/29/01
SCALE: AS SHOWN
FIGURE: 4
DRAWING NO: 1130-1A
700 MAIN STREET
NEW CASSEL, NEW YORK
DRAWN BY: S.T.M.
APPR. BY: E.A.W.



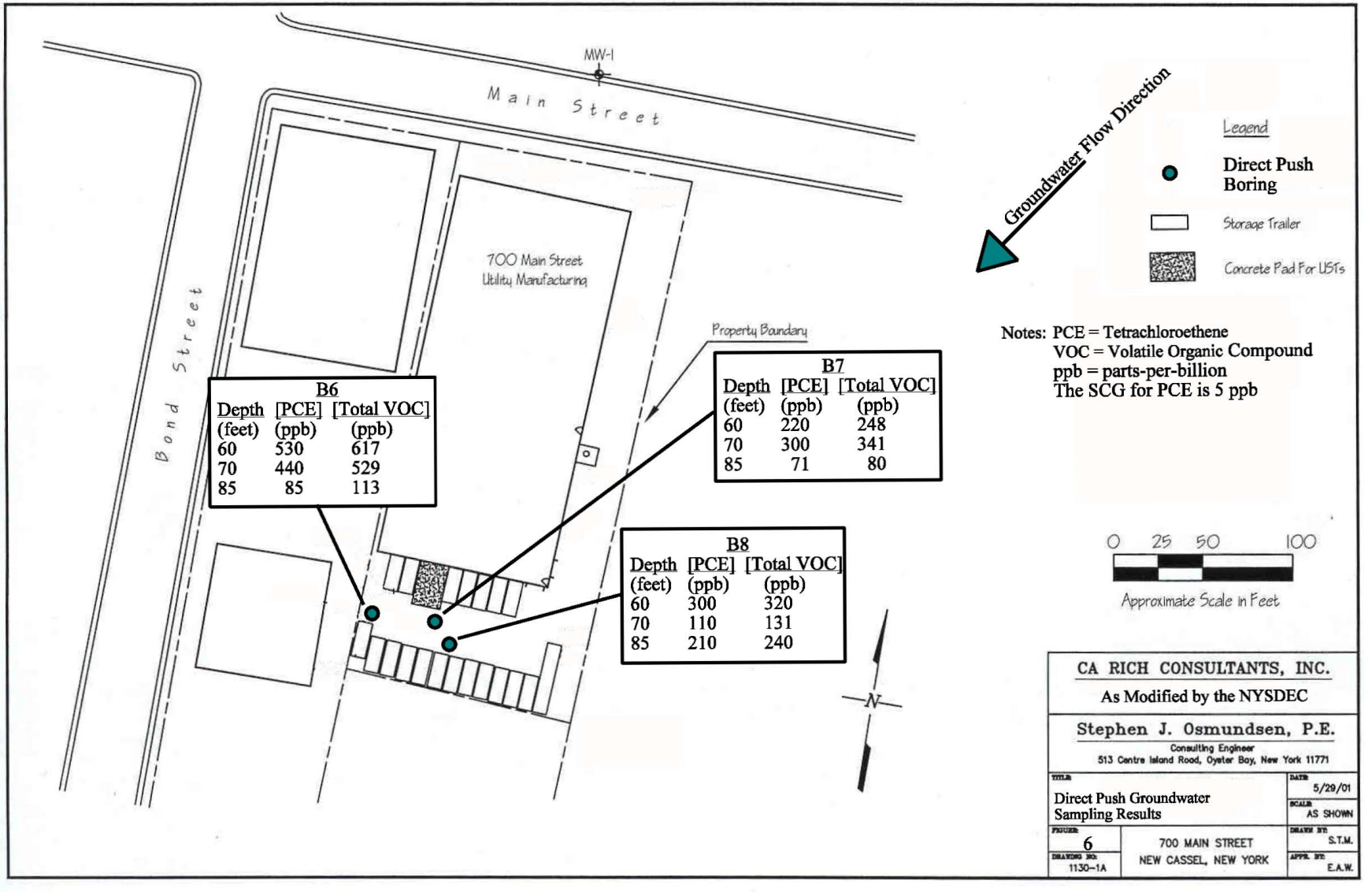
CA RICH CONSULTANTS, INC.

As Modified by the NYSDEC

Stephen J. Osmundsen, P.E.

Consulting Engineer
513 Centre Island Road, Oyster Bay, New York 11771

TITLE: Monitoring Well Sampling Results - Remedial Investigation		DATE: 5/29/01
		SCALE: AS SHOWN
FIGURE: 5	700 MAIN STREET NEW CASSEL, NEW YORK	DRAWN BY: S.T.M.
DRAWING NO: 1130-1A		APPR. BY: E.A.W.



Notes: PCE = Tetrachloroethene
VOC = Volatile Organic Compound
ppb = parts-per-billion
The SCG for PCE is 5 ppb

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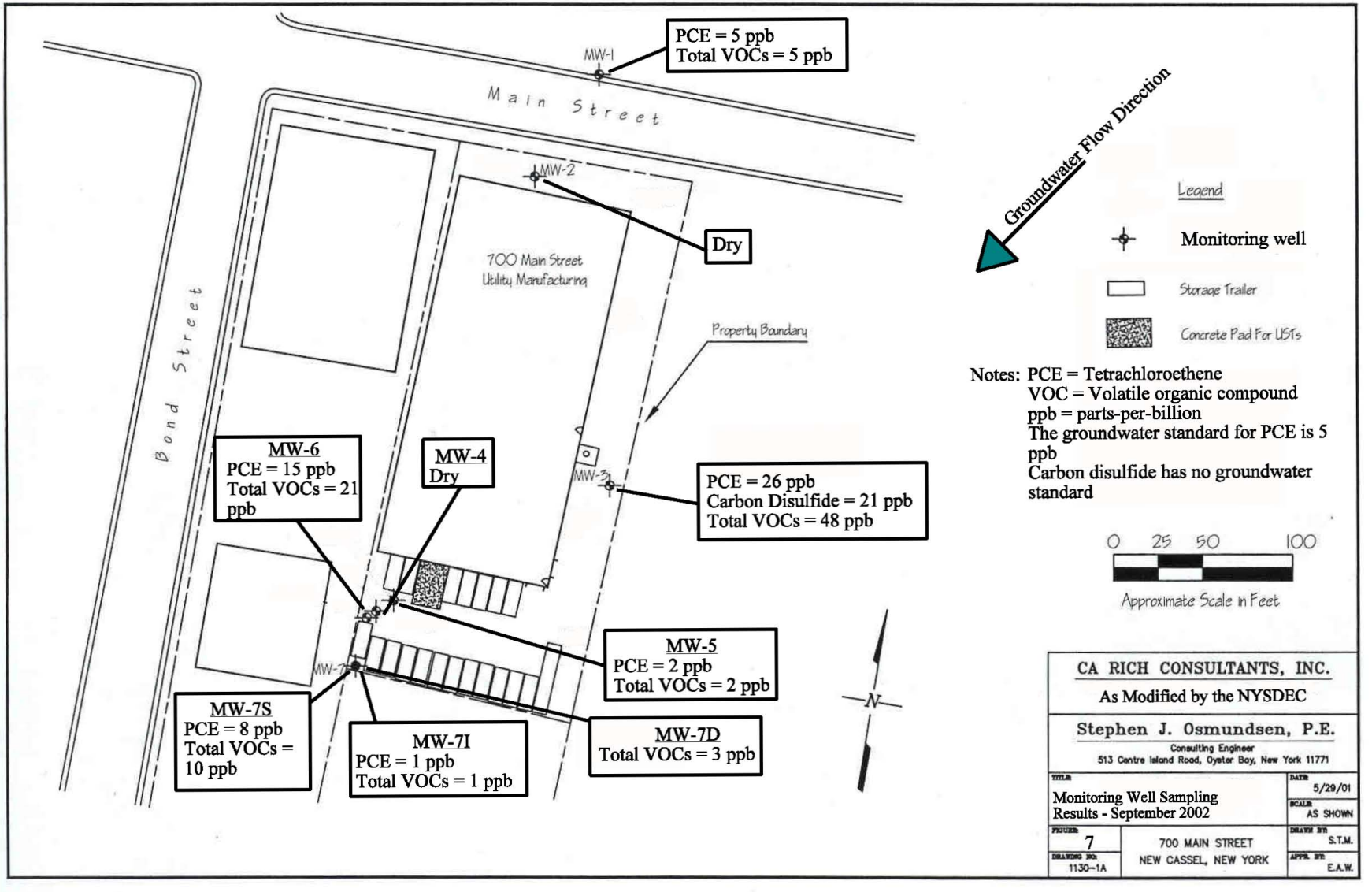
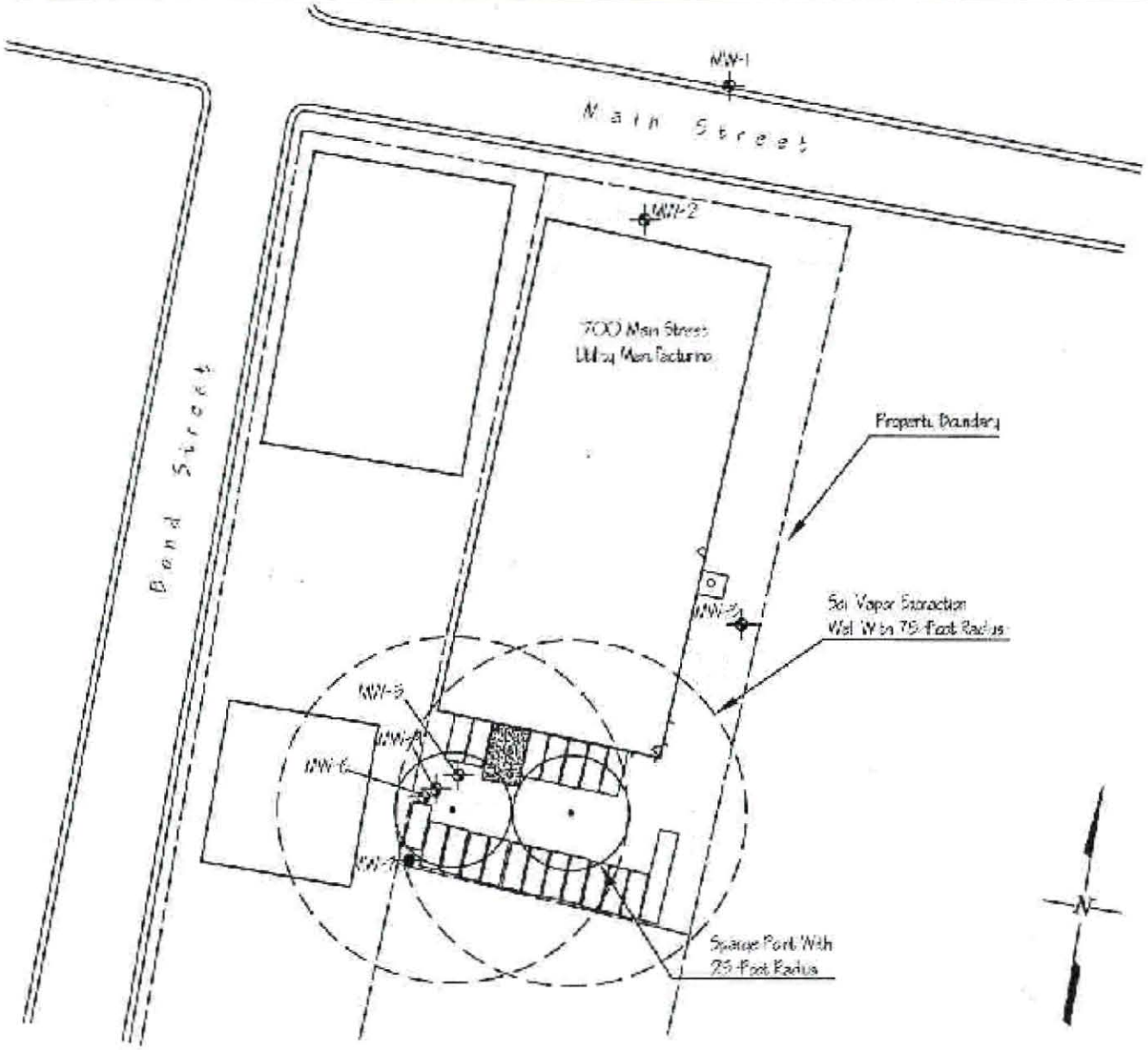
513 Centre Island Road, Oyster Bay, New York 11771

TITLE: Direct Push Groundwater Sampling Results	DATE: 5/29/01
	SCALE: AS SHOWN
FIGURE: 6	DRAWN BY: S.T.M.
DRAWING NO.: 1130-1A	APPR. BY: E.A.W.

700 MAIN STREET
NEW CASSEL, NEW YORK


MW-1
PCE = 5 ppb
Total VOCs = 5 ppb
Main Street
MW-2
Dry
700 Main Street
Utility Manufacturing
Property Boundary
Bond Street
MW-6
PCE = 15 ppb
Total VOCs = 21 ppb
MW-4
Dry
MW-3
PCE = 26 ppb
Carbon Disulfide = 21 ppb
Total VOCs = 48 ppb
MW-5
PCE = 2 ppb
Total VOCs = 2 ppb
MW-7
MW-7S
PCE = 8 ppb
Total VOCs = 10 ppb
MW-7I
PCE = 1 ppb
Total VOCs = 1 ppb
MW-7D
Total VOCs = 3 ppb
N
Groundwater Flow Direction
Legend
Monitoring well
Storage Trailer
Concrete Pad For USTs
Notes: PCE = Tetrachloroethene
VOC = Volatile organic compound
ppb = parts-per-billion
The groundwater standard for PCE is 5 ppb
Carbon disulfide has no groundwater standard
0 25 50 100
Approximate Scale in Feet
CA RICH CONSULTANTS, INC.
As Modified by the NYSDEC
Stephen J. Osmundsen, P.E.
Consulting Engineer
513 Centre Island Road, Oyster Bay, New York 11771
TITLE
Monitoring Well Sampling Results - September 2002
DATE 5/29/01
SCALE AS SHOWN
FIGURE 7
DRAWING NO. 1130-1A
700 MAIN STREET
NEW CASSEL, NEW YORK
DRAWN BY S.T.M.
APPR. BY E.A.W.



Legend

- Monitoring well triplet
- Single Monitoring Well
- Storage Trailer
- Concrete Pad For USTs

0 25 50 100

Approximate Scale in Feet

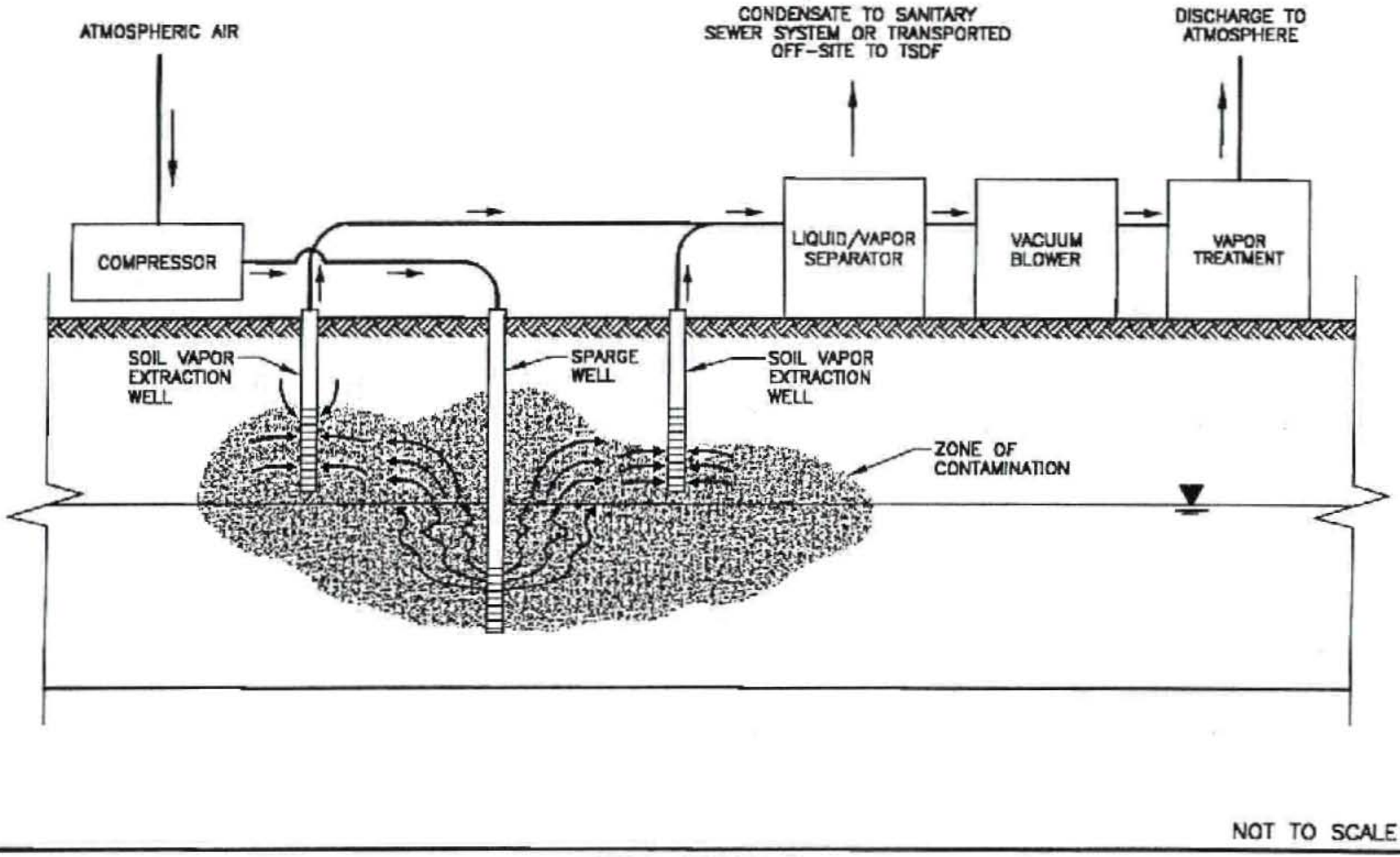
CA RICH CONSULTANTS, INC.

As Modified by the NYSDEC

Stephen J. Osmundsen, P.E.

Consulting Engineer
513 Centre Island Road, Oyster Bay, New York 11771

TITLE: SOIL VAPOR EXTRACTION & AIR SPARGE POINT LAYOUT		DATE: 5/30/91
		SCALE: AS SHOWN
PROJECT NO: 8	700 MAIN STREET NEW CASSEL, NEW YORK	DRAWN BY: S.T.M.
DRAWING NO: 1130-1B		APPR. BY: S.J.O.



IN-SITU AIR SPARGING SYSTEM SCHEMATIC

FIGURE 9

APPENDIX A

Responsiveness Summary

RESPONSIVENESS SUMMARY

Utility Manufacturing/Wonder King Site
Operable Unit No. 1 - On-Site Contamination
Town of North Hempstead, Nassau County, New York
Site No. 1-30-043H

The Proposed Remedial Action Plan (PRAP) for the Utility Manufacturing/Wonder King 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 November 21, 2002. The PRAP outlined the remedial measure proposed for the contaminated soil and groundwater at the Utility Manufacturing/Wonder King 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 December 12, 2002, which included a presentation of the Remedial Investigation (RI) and the Feasibility Study (FS) as well as 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 December 27, 2002.

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

COMMENT 1: Is the air from the soil vapor extraction (SVE) system filtered?

RESPONSE 1: Yes, the air from the SVE system is filtered using activated carbon before being released to the atmosphere. The activated carbon removes volatile organic compounds (VOCs) from the air.

COMMENT 2: Has the air sparge/soil vapor extraction (AS/SVE) system cleaned up the overall groundwater contamination at the New Cassel Industrial Area (NCIA)?

RESPONSE 2: The AS/SVE system was designed to clean up the soil and groundwater contamination within the boundaries of the Utility Manufacturing/Wonder King site. Treatment systems have been installed at several other sites in the NCIA. Groundwater contamination located south of Old Country Road will be addressed in a separate ROD.

COMMENT 3: What is the difference between a well and an aquifer?

RESPONSE 3: An aquifer is a water bearing unit of soil or rock. Groundwater monitoring wells are drilled below the water table to sample an aquifer at a specific depth.

COMMENT 4: Local residents are concerned about the Greystone Building and Maintenance Corporation, located at 881 Prospect Avenue. This company vacuums the debris from storm sewers and stores the debris on the ground at their property. The odor from the debris is objectionable. Also, Greystone allows water used to wash their trucks to drain to the street, creating pools of standing water. In addition, the company parks excessive cars and trucks on the street and in the neighboring church parking lot.

RESPONSE 4: The NYSDEC inspected this site on October 28, 2002 and sent a letter to the site owner on November 27, 2002. In the letter, the NYSDEC ordered Greystone to stop storing any additional material on the ground in their yard. The facility will need a construction and demolition processing permit before they could store any materials on the ground. Furthermore, Greystone was ordered to properly dispose of the material they had on-site. Staff at the NYSDEC's Region 1 office are working to bring this property into compliance with New York State laws and regulations and can be reached at 631-444-0375. However, as the NYSDEC has no jurisdiction over vehicle parking, the parking issue should be discussed with local government officials.

Mr. Audie Kranz of the Utility Manufacturing Company submitted a letter (dated December 26, 2003) which included the following comments:

COMMENT 1: The PRAP states that discharges into underground cesspools and storm drains resulted in the disposal of hazardous wastes. Utility does not dispose of hazardous waste at the subject property. Furthermore, the PRAP states that the waste contaminated the groundwater at this site. However, 0 of 11 soil samples collected at the site exceeded the NYSDEC TAGM of 1.4 ppm for tetrachloroethylene (PCE). The TAGM of 1.4 ppm is considered to be the concentration in soil that is protective of groundwater.

RESPONSE 1: The eleven soil samples referenced in the comment were obtained during the Remedial Investigation (RI), which was conducted between 1998 and 2000. Although the eleven samples did not exceed soil cleanup levels for VOCs, these samples were taken ten years after the on-site cesspools and dry wells were remediated. Samples obtained prior to the drainage structure remediation had concentrations exceeding NYSDEC cleanup levels for PCE and its chemical degradation products, trichloroethylene (TCE) and dichloroethylene (DCE). For example, a sample obtained in 1988 from the on-site septic system had a PCE concentration of 7 ppm, exceeding the SCG of 1.4. TCE was detected in a composite sample of two on-site dry wells at 6.7 ppm, exceeding the SCG of 0.7 ppm. DCE was detected in several drainage structures and exhibited a maximum concentration of 110 ppm in an on-site leaching pool. The SCG for DCE in soil is 0.4 ppm.

Although the drainage structures were remediated in 1988, a groundwater remediation system was not installed at the site until 2001. Contaminants from these drainage structures leached into the groundwater prior to the drainage structure remediation and remained in the groundwater until they were removed by the groundwater treatment system.

COMMENT 2: The PRAP states that Utility "uses" tetrachloroethene (PCE). The term "uses" implies that a waste product is generated. Utility "resells" PCE, but does not "use" it at the property.

RESPONSE 2: Utility transfers PCE from bulk containers into smaller bottles. Therefore, the text of the ROD has been modified to state that Utility "repackages" PCE.

COMMENT 3: The PRAP goes on to state that Utility "uses 20,000 pounds of tetrachloroethene per year". In fact, Utility resells approximately 4,000 pounds of tetrachloroethene per year.

RESPONSE 3: In a February 26, 1986 letter to the Untied States Environmental Protection Agency (EPA), Utility stated that they purchased 19,600 pounds of PCE in 1985. From 1990-1994, Utility submitted chemical/solvent waste reports to the Nassau County Health Department listing annual PCE purchases ranging from 23,600-45,760 pounds. Based on the information provided in comment 2, the NYSDEC assumes that Utility repackages and resells all of the purchased PCE. The text of the ROD has been changed to reflect the historic and current PCE processing rates.

COMMENT 4: The PRAP states that "PCE and other volatile organic compounds" were detected in several drainage structures at the property. It is important to note that PCE was not the primary contaminant detected in these drainage structures. In addition, the clean out of these structures was overseen by the NCDH. Furthermore, as presented in the PRAP, in the 11 soil samples in which PCE was detected, none exceeded the NYSDEC Standards, Criteria or Guidance (SCGs).

RESPONSE 4: As explained in response 1, PCE and its chemical degradation products, TCE and DCE, were detected above soil cleanup levels in several drainage structures before these drainage structures were remediated in 1988. The 11 soil samples referenced in the comment were obtained ten years after the contaminated soil was removed from the drainage structures.

COMMENT 5: The PRAP states that upon issuance of the ROD, the NYSDEC will approach the PRPs to implement the selected remedy under an Order on Consent. The system has been in operation for over one year and we are approaching the termination criteria outlined in the approved IRM work plan. It appears, based on the successful operation of this equipment, that following the issuance of the ROD, a program of post-remediation monitoring should be performed, rather than implementation of the selected remedy.

RESPONSE 5: The selected remedy in the ROD remains no further action with continued operation of the AS/SVE system. Based on its review of groundwater monitoring data that showed contaminant levels ranging from below to marginally above New York State groundwater standards, the NYSDEC in February 2003 allowed Utility to temporarily turn off the AS/SVE system. While the system is turned off, groundwater will be sampled quarterly and if the data indicates that groundwater concentrations have rebounded, the AS/SVE system will be turned back on. Although Utility has recently submitted a post remediation monitoring plan for NYSDEC review, the elements of the remedy continue to apply until the remedial objectives for the site have been achieved, or until the NYSDEC determines that continued operation is technically impracticable or not feasible.

COMMENT 6: The PRAP lists SVOCs as contaminants of concern. There was only one out of 11 detections of the SVOCs benzo(a)anthracene and benzo(a)pyrene above the TAGM. The location of the detections is protected by an engineering control in the form of asphalt pavement. In fact, it is likely that the asphalt was the source of these compounds. As such, the SVOCs should not be considered contaminants of concern at this site.

RESPONSE 6: As these two SVOCs exceed SCGs for soil, they are considered contaminants of concern. Although the two SVOCs marginally exceeded SCGs in subsurface soil, no SVOCs exceeded SCGs in groundwater. The NYSDEC agrees that since the site is paved, which inhibits leaching of contaminants from soil into groundwater, remediation of on-site contaminated soil is unnecessary.

COMMENT 7: The PRAP again states the range of VOC concentrations as 1,019 ppb to 48 ppb. The 48 ppb level was measured in upgradient well MW-3 and represents the background level of PCE flowing onto the property from

neighbors. The highest concentration of VOCs in the area of concern was 21 ppb in well MW-6 (at the most recent sampling event). The range on-site would be more accurately stated as 1,019 ppb to 21 ppb.

RESPONSE 7: MW-3 is located within the boundaries of the site. As hazardous waste was disposed of at several locations at the site, the contamination in the well may originate on-site. Therefore, the NYSDEC considers MW-3 to be an on-site well.

COMMENT 8: The PRAP states that "The NYSDEC believes that the IRM has accomplished these remediation goals for on-site contamination, provided that it continues to be operated and maintained in a manner consistent with the IRM Work Plan." The PRAP then goes on to state that the remediation system would continue to operate until the standards (SCGs) are met. This should be revised to state that the system would continue to operate until the termination criteria in the IRM Work Plan are met.

RESPONSE 8: As stated in response 5, 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 technically impracticable or not feasible.

COMMENT 9: Figures 4, 5, and 6 have artwork and text that were not included on the original CA Rich drawings. A footnote should be added to these figures indicating what information has been added by NYSDEC and that the CA Rich figure is used as a base map for reference only.

RESPONSE 9: Text has been added to the ROD figures to indicate that the NYSDEC has modified drawings that were originally prepared by C.A. Rich Consultants.

APPENDIX B

Administrative Record

ADMINISTRATIVE RECORD

Utility Manufacturing/Wonder King Site
Operable Unit No. 1 - On-Site Contamination
Town of North Hempstead, Nassau County, New York
Site No. 1-30-043H

1. Proposed Remedial Action Plan for the Utility Manufacturing/Wonder King site, Operable Unit No. 1, dated November 2002, prepared by the NYSDEC.

2. Order on Consent, Index No. W1-0795-97-06, between NYSDEC and the Utility Manufacturing Company, executed on December 23, 1997.

3. "Multisite PSA Report, New Cassel Industrial Area", March 1996, prepared by Lawler, Matusky & Skelly Engineers LLP.

4. "Work Plan, Utility Manufacturing/Wonder King Site", November 1997, prepared by Anson Environmental Ltd.

5. "Phase One Field Investigation Report to Comply with Work Plan for Utility Manufacturing/Wonder King Site", January 21, 1999, prepared by Anson Environmental Ltd.

6. "Focused Remedial Investigation Soil Report to Comply with Work Plan for Utility Manufacturing/Wonder King Site", Volumes 1 and 2, August 1999, prepared by Anson Environmental Ltd.

7. "On-Site Groundwater Investigation, Utility Manufacturing/Wonder King", December 11, 2000, prepared by Anson Environmental Ltd.

8. "Feasibility Study to Comply with Work Plan for Utility Manufacturing/Wonder King Site", March 4, 1999, prepared by Anson Environmental Ltd.

9. "New Cassel Industrial Area Offsite Groundwater Remedial Investigation/Feasibility Study Report", Volumes 1-3, September 2000, prepared by Lawler, Matusky & Skelly Engineers LLP.

10. "Interim Remedial Measures Work Plan, Utility Manufacturing Company", August 2001, prepared by CA Rich Consultants, Inc.

11. Groundwater Sampling Results for Utility Manufacturing, collected September 18, 2002, analyzed by the NYSDEC.

12. "Fact Sheet, Proposed Remedial Action Plan", November 2001, prepared by the NYSDEC.

13. Letter dated December 26, 2002 from Audie Kranz of Utility Manufacturing Company.