Aztech Technologies, Inc.

Periodic Review Report
for the
Baldwin Place Shopping Center
(now Somers Commons)

80 U.S. Route 6
Baldwin Place, Westchester County, New York

Covering the Time Period from
February 15, 2009 Through February 15, 2014

NYSDEC Site No. 3-60-023

December 17, 2014

Prepared for:
NYSDEC – Central Office
625 Broadway
Albany, New York 12233-7020

REMEDIATION SOLUTIONS

ENVIRONMENTAL CONSULTING

DRILLING APPLICATIONS

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aztechtech.com

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Enclosure 1
Engineering Controls – Standby Consultant/Contractor Certification Form

Site Details	Box 1	
Site No. 360023		
Site Name Baldwin Place Shopping Center (now Somers Commons)		
Site Address: 80 Route 6 Zip Code: 10505 City/Town: Baldwin Place County: Westchester Site Acreage: 28.0		
Reporting Period: February 15, 2009 to February 15, 2014		
	YES	**NO**
1. Is the information above correct? If NO, include handwritten above or on a separate sheet.	**X**	
2. To your knowledge has some or all of the site property been sold, subdivided, merged, or undergone a tax map amendment during this Reporting Period ?		**X**
3. To your knowledge has there been any change of use at the site during this Reporting Period (see 6NYCRR 375-1.11(d)) ?	**X**	
4. To your knowledge have any federal, state, and/or local permits (e.g., building, discharge) been issued for or at the property during this Reporting Period ?	**X**	
If you answered YES to questions 2 thru 4, include documentation or evidence that documentation has been previously submitted with this certification form.		
5. To your knowledge is the site currently undergoing development ?		**X**

	Box 2	
	YES	**NO**
6. Is the current site use consistent with the use(s) listed below ? Restricted-Residential, Commercial, and Industrial	**X**	
7. Are all ICs/ECs in place and functioning as designed ?	**X**	

IF THE ANSWER TO EITHER QUESTION 6 OR 7 IS NO, sign and date below and contact the DEC PM regarding the development of a Corrective Measures Work Plan to address these issues.

_____
Signature of Standby Consultant/Contractor Date

Site No. 360023 **Box 3**

Description of Institutional Controls

Parcel	Owner	Institutional Control
4.20-1-11	U.B. Somers, Inc (c/o Urstadt Biddle Properties Inc., Greenwich, Ct.)	
	BVS Somers Commons, LLC (c/o Industry Consulting Group, Wichita Falls, Tx)	Monitoring Plan O & M Plan
	U.B. Somers, Inc. (c/o Marvin Poer Co., Dallas, Tx)	
	BVS Somers Commons, LLC (c/o Stop & Shop, Quincy, Ma)	

Long Term Monitoring and Operation and Maintenance Plan is in place.

Description of Engineering Controls **Box 4**

Parcel	Engineering Control
4.20-1-11	Groundwater Treatment System

One groundwater pump and treat system is currently in operation in the former source area to address residual contamination/shallow plume containment. Long term groundwater monitoring is ongoing.

Periodic Review Report (PRR) Certification Statements **Box 5**

1. I certify by checking "YES" below that:

   a) the Periodic Review report and all attachments were prepared under the direction of, and reviewed by, the party making the certification, including data and material prepared by previous contractors for the certifying period, if any;

   b) to the best of my knowledge and belief, the work and conclusions described in this certification are in accordance with the requirements of the site remedial program, and generally accepted engineering practices; and the information presented is accurate and complete.

YES	NO
X	

2. If this site has an IC/EC Plan (or equivalent as required in the Decision Document), for each Institutional or Engineering control listed in Boxes 3 and/or 4, I certify by checking "YES" below that all of the following statements are true:

   a) the Institutional Control and/or Engineering Control(s) employed at this site is unchanged since the date that the Control was put in-place, or was last approved by the Department;

   b) nothing has occurred that would impair the ability of such Control, to protect the public health and the environment;

   c) nothing has occurred that would constitute a failure to comply with the Site Management Plan, or equivalent if no Site Management Plan exists;

YES	NO
X	

IF THE ANSWER TO QUESTION 2 IS NO, sign and date below and contact the DEC PM regarding the development of a Corrective Measures Work Plan to address these issues.

_____ _____

Signature of Standby Consultant/Contractor Date

IC/EC CERTIFICATIONS

Box 6

Qualified Environmental Professional Signature

I certify that all information in Boxes 2 through 5 are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

I Randolph H. Hoose at Aztech Technologies, Inc.
5 McCrea Hill Road
Ballston Spa, New York 12020

am certifying as a Qualified Environmental Professional.

Randy Hoose

Signature of Qualified Environmental Professional

12-17-2014
Date

Certificate **2011:15934**
Issued : 12/8/2011
Building Permit No. 2011:25579

TOWN OF SOMERS
WESTCHESTER COUNTY, N. Y.
CERTIFICATE OF OCCUPANCY/COMPLIANCE

This Is to certify that
BVS AQ CO, LLC
P.O. BOX 177

Having filed Application for a Certificate of Occupancy and Compliance applying to the premises located at
84 ROUTE 6

on the Town of Somers Assessment map known as:
Sec-Blk-Lot: **00/4.20-1-11.8**

in the following zone as shown on the building zone map:

and the application having been approved, authority is hereby given to occupy or use said premises or building or part thereof for the following purposes:
NEW BUILDING TO EXISTING SHOPPING CENTER
(BANK) - CHASE BANK

under the limitations:

on and after this date until revoked and subject to all provisions of
THE ZONING ORDINANCE OF THE TOWN OF SOMERS

BUILDING INSPECTOR'S SIGNATURE

Applicant Copy __
Office Copy __

BUILDING PERMIT

TOWN OF SOMERS
337 ROUTE 202
SOMERS, NY 10589
914-277-3539

Permit No: **2011:25579** Application No: 88 Issue Date: 5/18/2011

SEC-BLK-LOT: 00/4.20-1-11.8 Zone:

Permit Fee: $2,011.00
Zone Fee : $10.00

A PERMIT IS HEREBY GIVEN BY THE BUILDING DEPARTMENT, TOWN OF SOMERS, COUNTY OF WESTCHESTER, N.Y., FOR THE STRUCTURE DESCRIBED HEREIN:

OWNER'S NAME & ADDRESS: BVS AQ CO, LLC
P.O. BOX 177
SOMERS, NY 10589

SECOND OWNER:

Location Of Building : 84 ROUTE 6

WORK DESCRIPTION. NEW BUILDING TO EXISTING SHOPPING CENTER (BANK) - CHASE BANK

Approximate Cost: $650,000.00

1. I AM FAMILIAR WITH THE ZONING AND BUILDING ORDINANCE OF THE TOWN OF SOMERS, AND DO HEREBY AGREE TO ABIDE BY THEM.
2. THE INFORMATION STATED ABOVE IS CORRECT AND ACCURATE.

IMPORTANT

1. THIS PERMIT EXPIRES BY LIMITATION ONE YEAR FROM THE DATE OF ISSUE, SUBJECT TO EXTENSION BY THE BUILDING INSPECTOR. RENEWAL PERMITS ARE SUBJECT TO A FULL FEE IN EFFECT AT THE TIME OF RENEWAL.
2. IT IS THE RESPONSIBILITY OF THE OWNER TO COMPLY WITH ALL APPLICABLE TOWN ORDINANCES AND TO CALL FOR THE REQUIRED INSPECTIONS AT LEAST TWO DAYS IN ADVANCE.
3. **UPON COMPLETION, A CERTIFICATE OF OCCUPANCY AND COMPLIANCE MUST BE OBTAINED, RESIDENTIAL FEE: $50 COMMERCIAL: $75.**
4. THIS PERMIT ISSUED SUBJECT TO ALL FEDERAL AND STATE LAWS AND REGULATIONS AND TO THE NEW YORK STATE BUILDING AND PLUMBING CODE AND THE ZONING ORDINANCE OF THE TOWN OF SOMERS.

SIGNATURE OF BUILDING INSPECTOR
EFREM CITARELLA

PERMIT INSPECTIONS LISTING

TOWN OF SOMERS Building Department
SBL : 4.20-1-11.8
Owners Name: BVS AQ CO, LLC
Permit Number: 2011:25579 Date: 12/8/2011 Time: 10:13 AM

Type	Description	DateComplete	Passed	Init	Comments
FOOT	FOOTING INSPECTION	7/13/2011	Passed	TT	
FDN	FOUNDATION & WATERPROO	7/20/2011	Failed	TT	
	INSUFFICIENT FROST DEBTH.(BOTTOM OF FOOTING)				
OTHE	OTHER	7/27/2011	Passed	TT	
	CANOPY FOOTING.				
SLAB	SLAB PRE-POUR	8/5/2011	Passed	TT	
CO	CERTIFICATE OF OCCUPAN	11/21/2011	Passed	TT	

1.0 INTRODUCTION

This document is required as an element of the remedial program at the former Baldwin Place Mall, located at 80 U.S. Route 6 in the Town of Somers, Westchester County, New York (hereinafter referred to as the "Site"). The Site is managed under the New York State (NYS) Inactive Hazardous Waste Disposal Site Remedial Program administered by New York State Department of Environmental Conservation (NYSDEC). The Site, which is currently known as Somers Commons, is listed by the NYSDEC as a Class 2 Inactive Hazardous Waste Site (ID No. 3-60-023). Class 2 sites are sites where hazardous waste disposal has been confirmed and, its presence presents a significant threat to public health and the environment.

Several investigative and remedial activities have been conducted at the Site in accordance with the 1995 Record of Decision (ROD), which was executed on November 4, 1995. The Site currently operates two (2) groundwater pump and treat remedial systems. Plant 1 is located near the source area and, has operated for over 10 years. Plant 2 is the former water supply system for the mall which was later extended to provide potable water to the Meadow Park Road residential area located southeast of the site. This residential area was disconnected from Plant 2 when the municipal water system became available in the area. Plant 2 continued to operate as a groundwater extraction and treatment system after it was disconnected from the Meadow Park Road residential area. Plant 2 ceased operation in January, 2011 and has recently been recommended for decommissioning after a September, 2014 remedial system optimization (RSO) completed by MACTEC Engineering and Consulting, P.C. of Portland Maine (MACTEC). Annual soil vapor intrusion (SVI) monitoring is also conducted in one retail establishment within the mall.

In April, 2009, NYSDEC issued a callout (callout no. 117995) that initiated Aztech's involvement with the Site. The purpose of the callout was for Aztech to operate and maintain the two (2) water treatment systems operating at the site at that time (Plant 1 and Plant 2). This included regular influent and effluent sampling and, routine maintenance of the two (2) treatment plants. Site monitoring was anticipated to be via an engineering services consultant.

The NYSDEC has established the periodic review process in order to determine if a site is being managed in accordance with the remedies established for that site in its governing documents. In particular, the periodic review report (PRR) seeks to evaluate site-specific inspection, monitoring, and other related data, that will help to assess whether the remedies (engineering and/or institutional controls) for a site are being implemented properly. In particular, the PRR seeks to evaluate pertinent site-related data and evaluate whether the remedies established for the site remain protective of human health and the environment.

This PRR, and all previous monitoring and reporting, have been conducted under the original (November, 1995) ROD and, the January, 2004 Plan for Routine Groundwater Monitoring for the Baldwin Place Mall (by Lawler, Matusky & Skelly Engineers, LLP). The November, 1995 ROD

established remedial goals for the site; the January, 2004 plan for routine groundwater monitoring established procedures for sampling on-site groundwater monitoring wells; remedial pumping wells; off-site groundwater monitoring wells (Meadow Park Road monitoring wells); the Lake Baldwin Water District and, private water supply wells.

2.0 SITE BACKGROUND AND HISTORY

The Site is a 28 acre parcel (consisting of parcel Nos. 4.20-1-11.2 through 4.20-1-11.9) in a mixed residential/commercial area within the Town of Somers, Westchester County, New York (**Figure 1**). The Site was a mostly vacant shopping center until the early 2000's, when it was demolished to make way for the current shopping center (Somers Commons) located on the property. The property is bounded by U.S. Route 6 to the northwest, a bike path (a former railroad embankment) to the east and, an east-west trending section of Route 118 to the north.

The Site was used for agricultural purposes (as an orchard) prior to its development into the Baldwin Place Shopping Center in 1965. A dry cleaning business is known to have operated on the premises since 1967. This business came under scrutiny in 1979 as a result of a county-wide investigation, by the Westchester County Department of Health (WCDOH), of sites vulnerable to the dry cleaning solvent tetrachloroethene (PCE). During this investigation, WCDOH identified PCE in the water supply wells associated with the shopping center but, no evidence of disposal (or source) was found. Subsequent sampling by WCDOH in 1984 confirmed that PCE was present in the shopping center water supply at concentrations that were less than the 50 part per billion (ppb) guidance value for drinking water at that time. Big V Supermarkets acquired the shopping center in 1986.

Topographically, the Site is situated in a relatively high location with drainage toward the northwest and southeast. The eastern portion of the site drains to a south flowing stream that lies between the Site and the residential properties on Meadow Park Road. This is a tributary to the nearby Muscoot River. The western portion of the Site drains to a north-flowing stream that empties into two ponds northwest of the property and Lake Baldwin prior to its confluence with the Muscoot River. The Muscoot River flows south and empties into the Amawalk Reservoir, approximately 1.5 miles south of the Site.

2.1 Previous Investigations

During the county-wide investigations conducted by WCDOH in 1979 (and subsequent investigations conducted through 1989), the presence of PCE in groundwater was confirmed. The purpose of this sampling program initiated by WCDOH was to assess potential drinking water problems in areas where present and past dry cleaning establishments had been located. The program started by collection of numerous samples from private water supply wells throughout the county. The results of that effort identified impacts to the shopping center water supply. However, no evidence of disposal by the dry-cleaning establishment was found. Nevertheless, based on confirmation of historical groundwater quality data, NYSDEC concluded that the dry-cleaner was the most likely source of the impacts identified. As such, the Site was listed on the Registry of Inactive Hazardous Waste Sites in New York State as a Class 2 site with the groundwater impacts determined to be a significant threat to public health.

A groundwater investigation was conducted in May, 1989 and, a Water Supply and Treatment Alternatives Study was conducted later that year in October, 1989. A Remedial

Investigation/Feasibility Study (RI/FS) was concluded in 1995 and led to issuance of a Record of Decision (ROD) for the Site. A site map depicting the Baldwin Place Shopping Center, prior to its raze and rebuild in the early 2000's, is presented as **Figure 2**.

2.1.1 Site Geology/Hydrogeology

The RI found that the Site and vicinity is underlain by glacial till, weathered bedrock, and bedrock. The till comprises the uppermost geologic and water bearing unit. The till is thin near the western/north-western site boundaries and thickens to the south-southeast. Below the glacial till is approximately 15 to 30 feet of weathered bedrock that grades from highly weathered to competent. The depth to competent bedrock ranges from 35 feet below grade (in the western part of the Site) to about 100 feet (in the east/southeastern part of the Site). The unweathered bedrock is characterized as biotite gneiss.

The weathered and unweathered bedrock is under "unconfined" conditions in the extreme western and northwestern portion of the Site. In this area, the overlying glacial till is thin and mostly unsaturated. The glacial till thickens and, becomes saturated throughout the main portion of the Site. The occurrence of shallow groundwater beneath the site generally ranges from 2.0 feet to 7.0 feet below grade. Regional groundwater flow in the off-site area to the northeast is generally in a southwesterly direction toward the Site. However, the presence of an apparent groundwater divide (trending in a south-southwesterly/north-northeasterly direction) beneath the southern portion of the Site diverts groundwater movement toward the south and southeast (in the area southeast of the divide) and, toward the northwest (in the area northwest of the divide). This divide persists under pumping conditions relating to "Plant 2", the former water supply for the shopping center. Within the deeper bedrock zone, regional groundwater flow also indicates a groundwater divide under static conditions with flow components toward the southeast on the southeast side of the divide, and toward the west/northwest on the northwest side of the divide. Additionally, where saturated glacial till overlies weathered/unweathered bedrock, a downward vertical gradient is evident between these two units.

2.1.2 Source Area

The RI included a test boring program that was conducted within an alleyway area behind the dry cleaning establishment. The analytical results of the soil sampling associated with this effort identified a 15 foot by 15 foot area of elevated PCE concentration within the unsaturated zone above the water table (approximately 3.0 feet below grade at this location). The maximum depth of the PCE impacted soil extended to approximately 15 feet below grade. Groundwater sampling within this area identified PCE concentrations as high as 24,000 micrograms per liter (ug/l). As such, this area, which is shown on Figure 2, was determined to be the source for the PCE concentrations identified in on-site and nearby off-site groundwater, and, within the water supply wells for the former shopping center.

2.1.3 Groundwater

The dry cleaning compound PCE and its related degradation by-products trichloroethene (TCE), and 1,2-dichloroethene (DCE) are the compounds of concern at this site. Groundwater within the source area has contained PCE concentrations as high as 24,000 ug/l. The location of the source area in relation to the aforementioned groundwater divide has caused site related compounds to migrate toward the southeast and, to the west. Historic PCE concentrations identified in on-site groundwater outside of the source area have been detected as high as 910 ug/l and, TCE and DCE have been identified as high as 190 ug/l and 61 ug/l, respectively.

Toward the southeast, where a strong downward vertical component of groundwater flow is present, the lateral distribution of site related compounds is limited. This is because groundwater flow is preferentially in a downward direction, ultimately recharging the underlying weathered and unweathered bedrock. Movement of site–related compounds within the weathered and unweathered bedrock has migrated toward an off-site residential area to the southwest. This area, which is approximately 1,200 feet from the source area, is known as the Meadow Park Road Area.

Toward the west and northwest, the downward vertical gradient between the glacial till and weathered bedrock/unweathered bedrock is not as strong. As such, the weaker vertical gradient allows impacted groundwater to move farther laterally, while also moving deeper vertically into the weathered/unweathered bedrock. This area, which is also approximately 1,200 feet from the source area, is a mixed commercial and residential area known as the Route 6 Area.

2.1.3.1 Water Supply Wells – Meadow Park Road Area

The Meadow Park Road Area is located southeast of the Site and includes several residential water supply wells that extend as far as the southernmost intersection between Meadow Park Road and Tomahawk Street (Route 118). Several water supply wells in this area have had detections of site-related VOCs (PCE, TCE and/or DCE) in excess of NYSDEC standards/guidance values for class GA groundwater as defined by NYSDEC in their Technical and Operational Guidance Series Memorandum (TOGS 1.1.1) of June, 1998. Seven (7) of these residential water supplies were equipped with point of entry treatment (POET) systems. The POET systems used granular activated carbon (GAC) as a media to remove site-related VOCs from the water supply prior to its use.

2.1.3.2 Water Supply Wells – Route 6 Area

The Route 6 Area is located west and northwest of the Site and includes commercial and residential water supply wells on US Route 6, Kennard Road and extends as far to the west as Mahopac Avenue. Several water supply wells in this area have had detections of site-related VOCs (PCE, TCE and/or DCE), as well as MtBE (methyl tertiary butyl ether) from a nearby gasoline release, in excess of the NYSDEC standards/guidance values (TOGS 1.1.1). Three (3)

commercial water supplies along Route 6 were equipped with POET systems based on impacts with site-related VOCs (PCE/TCE/DCE) while POET systems were installed on five (5) commercial and residential water supplies on US Route 6 and Kennard Road to address gasoline-related MtBE impacts.

2.2 Record of Decision and Remedial Actions

Big V Supermarkets entered into an Order on Consent with NYSDEC in September, 1991 where they either installed new POET systems or, assumed maintenance and operation of existing POET systems for the water supplies of commercial and/or residential properties impacted with site-related VOCs. This was part of an Interim Remedial Measure undertaken prior to issuance of the November, 1995 Record of Decision (ROD).

2.2.1 Record of Decision

The Groundwater Investigation and Water Supply and Treatment Alternatives Studies conducted in 1989 and, the RI/FS concluded in 1994 led to issuance of the ROD in November, 1995. The goals of the ROD were to:

- Prevent exposure (via inhalation, ingestion, and dermal contact) to soils containing unacceptable levels of PCE and its breakdown products;
- Prevent continued degradation of groundwater quality through migration of PCE and its breakdown products from impacted soil to groundwater;
- Prevent exposure (via inhalation, ingestion, and dermal contact) to groundwater impacted with unacceptable concentrations of PCE and its breakdown products;
- Restore groundwater quality (impacted by PCE and its breakdown products) to acceptable concentrations within a reasonable time frame; and,
- Prevent migration and discharge of site-related VOCs in groundwater to adjacent surface water bodies.

Therefore, the following elements were included in the ROD in order to satisfy its goals:

- Source removal via excavation of source area soil;
- Supply potable water to 19 residences on Meadow Park Road. This would be accomplished either by developing a new water district that derives its water supply via the two (2) water supply wells associated with the shopping center and treating that water via granular activated carbon (GAC) prior to distribution to the 19 residences or; continue maintenance and operation of the 19 individual POET systems on Meadow Park Road until such time that the Town of Somers extends the regional municipal water system into that area. Under the former option, Big V would operate the shopping center wells as a pump and treat groundwater remedial system;
- Maintain POET systems along US Route 6. This would be accomplished by continuing maintenance and operation of individual POET systems installed on commercial and/or residential properties located along US Route 6. Use of these POET systems would continue until groundwater quality is restored to drinking water standards or, an

alternate source of water supply becomes available. Additionally, any additional wells along Route 6 that became impacted by site-related VOCs in excess of drinking water standards would be equipped with a POET system;

- Connection to alternate water supply. Each of the residences and/or commercial establishments equipped with POET systems would be connected to the regional municipal system when it became available; and,
- Groundwater treatment in the source area. A groundwater pump and treat system (Plant-1) would be installed in proximity to the source area in order to capture vertical and horizontal flow from within and around the source area as well as to capture vertical leakage from the glacial till into the bedrock. Groundwater captured via this system would be treated via a separate treatment system and, be discharged to a nearby stream.

2.2.2 Remedial Actions

Big V Supermarkets assumed responsibility for implementing remedial actions required by the ROD until August 6, 2003, when liquidation of their assets under a bankruptcy proceeding terminated their funding of remedial efforts. NYSDEC has assumed direct responsibility for the continued implementation of the ROD since that time.

2.2.2.1 Source Removal

The purpose of this step was to remove approximately 135 cubic yards of source area soil from the area located behind (east) of the former dry cleaning operation. Note that the strip mall building that was the location of the former dry cleaning operation has since been razed. The former source area (shown on **Figure 3**), is located on the current site map for the Somers Commons shopping center. The excavation, which was completed in February 1997, entailed removal of the shallow soil above the footers of the former building foundation. Sheet piling was installed to form the walls of the remainder of the excavation. Altogether, 236 tons of impacted soil was removed. The former source area is currently presented as a lawn area on the north side of the Home Goods store.

2.2.2.2 Potable Water Supply - Meadow Park Road

The community water supply system was constructed in 1998 and started up during February 1999. This system delivered treated water obtained via the shopping center water supply to 17 of the 19 residences located on Meadow Park Road. These 17 residences in the Meadow Park Road Area have since been connected to the regional municipal water system when it became available in November, 2001. As such, the connection between the Site's former water supply and Meadow Park Road has since been terminated. The Sites former water supply wells continued operation as a groundwater pump and treat system (Plant 2). Plant 2 is currently not operating.

The individual supply wells serving the two (2) residences that were not connected into the municipal water system in November, 2001 were sampled quarterly until 2003, with annual

sampling in 2004, 2006, and 2007. Analytical results indicate that these wells have not been impacted by VOCs related to the Site, and those wells are no longer routinely sampled.

2.2.2.3 Maintain POET Systems Along Route 6

Big V maintained the POET systems at these residential and/or commercial properties until they were connected to the municipal system. In November 2001, several residences on Mahopac Avenue that had POET systems (and one additional residence that did not have a POET system) were connected by Big V to the municipal system. During May and June 2002, commercial properties that had POET systems on US Route 6 were connected by Big V to the municipal system. Additional connections to the municipal system continued through 2003.

2.2.2.4 Connection to Alternate Water Supply

As indicated in Section 8.4 of the ROD, both Big V Supermarkets and the NYSDEC agreed that connection to a permanent regional water supply system (when available) would be the selected water supply option in the long term. As such, connections to the municipal system in the area have been ongoing.

2.3 Engineering/Institutional Controls

The November, 1995 ROD imposed Engineering Controls for the site that initially included operation and maintenance of POET systems on residential and commercial water supply wells and/or development of a new water district (using the supply wells for the shopping center) until the regional municipal system would be available in the area. Engineering controls also included groundwater extraction and treatment via two (2) separate remedial systems (Plant 1 and Plant 2). Institutional controls include groundwater monitoring (via various monitoring wells, former off-site water supply wells and current water supply wells) and soil vapor intrusion (SVI) monitoring of Building 6 (the Home Goods store) associated with the Somers Commons shopping center. During the years since the effective date of the ROD, operation and maintenance of individual POET systems has ceased. This is because one of the long term goals of the ROD was the connection of nearby residences and commercial establishments to the regional municipal system once it became available.

2.3.1 Groundwater Extraction and Treatment

Groundwater extraction and treatment (GWE&T) at the site is via two (2) separate remedial systems. Plant 1 is located in proximity to the former source area and its purpose is to capture groundwater that becomes impacted with site related compounds via residual source area soil. Plant 2 treats impacted groundwater captured by the water supply wells for the former shopping center and, is operated in order to augment remedial efforts and mass removal from within the bedrock.

2.3.1.1 Plant 1

The former source area was located in the area that is currently adjacent to and north of Building 6 of the Somers Commons Shopping Center (Home Goods store). Excavation of the

former source area was completed in 1997. This former source area is currently presented as a grassy lawn area. Plant -1 was constructed and brought on-line in 1998.

Groundwater extraction is via one (1) shallow well (RW-1S), which draws impacted groundwater from the shallow portion of the glacial till overburden, and one (1) deeper well that draws impacted groundwater from a deeper portion of the glacial till overburden. The purpose of these pumping wells is to extract impacted groundwater before it can migrate off-site laterally and, before it can migrate vertically and enter the underlying bedrock. These wells are completed at depths of 49-feet and 83-feet below grade, respectively.

Both of the 4.0-inch inside diameter (ID) wells are equipped with 1/3 horsepower submersible pumps that convey groundwater from the subsurface to the Plant 1 treatment building. The design flow rate for the wells is approximately a ½ gallon per minute (gpm) from well RW-1S and 3.0 gpm from well RW-2D. Each well is equipped with a totalizing flow meter. Water conveyed to the treatment plant is sequentially filtered via 50 micron and 5 micron bag filters to remove particulate then passed through two (2) adsorption units (connected in series) that each contain 165 pounds of granular activated carbon (GAC). After filtration, discharge is to an unnamed tributary on the east side of the Site that eventually discharges to the Muscoot River.

The March, 1998 Operation and Maintenance Manual for the Baldwin Place Mall Plant 1 Groundwater Pump & Treat System (prepared by Lawler, Matusky & Skelly Engineers, LLP) provides details regarding operation and maintenance procedures to be employed for this treatment facility.

2.3.1.2 Plant 2

Plant 2, originally served as the water supply source for the Baldwin Place Shopping Center. Groundwater supply was via two (2) wells. Well P-1 is a 6.0-inch diameter well that is 260 feet deep with 140 feet of steel casing. Well P-2 is also 6.0-inches in diameter but is 400 feet deep. The length of casing is unknown. Safe well yields were determined to be 45 gpm and 30 gpm, respectively. The system typically operated via well P-1, with well P-2 serving as a backup when needed.

During the period between January 1999 to November 2001, Plant 2 served the dual objective of supplying the residences along Meadow Park Road with potable water and withdrawing additional groundwater for the remediation of the Site. After November 2001, the residences along Meadow Park Road were connected to the newly extended municipal water system. As such, the connection between Plant 2 and those residences was terminated. Plant 2 now serves only as a secondary remedial system to augment groundwater extraction.

Both of the 6.0-inch ID wells are equipped with 5.0 horsepower submersible pumps that convey groundwater from the subsurface to the Plant-2 treatment building. Water conveyed to the treatment plant is first filtered via 5 micron filters to remove particulate then passed through

two (2) adsorption units (connected in series) that each contain 1,600 pounds of GAC. After filtration, discharge is to an unnamed tributary on the east side of the Site that eventually discharges to the Muscoot River.

Plant 2 is not operational at this time and, has been recommended for decommissioning in a recent RSO conducted on behalf of NYSDEC by MACTEC.

2.3.2 Environmental Media Monitoring

No institutional controls (such as easements or deed restrictions) were ever required by either the Order on Consent or the ROD. However, various environmental media are monitored under the ROD and associated governing documents for the site. These environmental media include:

- On-site groundwater monitoring wells;
- Remedial pumping wells;
- Meadow Park Road monitoring wells;
- The Lake Baldwin Water district;
- Private potable wells, and;
- Soil Vapor Intrusion Sampling

Monitoring of these environmental media is in accordance with the January, 2004 Plan for Routine Groundwater Monitoring (Monitoring Plan) prepared by Lawler, Matusky & Skelly Engineers, LLP of Pearl River, New York. Some of the monitoring requirements have been amended based on site conditions.

2.3.2.1 On-Site Groundwater

The January, 2004 Monitoring Plan called for quarterly monitoring of groundwater samples from wells MW-5S, MW-7D and MW-12S. Wells MW-5S and MW-12S are both located in proximity to the former source area adjacent to the north side of Building 6; well MW-7D is located in the paved parking area west of Building 6. The Monitoring Plan also called for annual sampling of wells MW-4S and MW-4D (located near the northern entrance of the shopping center north of Building 5), well MW-8S (located near the northeast entrance of the shopping center), and, wells MW-9S and MW-9D (located in the paved area adjacent to Building 2 on the west side of the shopping center).

Purge water from wells MW-4S, MW-4D, MW-5S and MW-8S is to be directed to adjacent grassy areas whereas purge water from all of the other on-site wells is to be treated via Plant 1 prior to discharge. Analysis is for the full list of VOCs via EPA analytical method 601 and for MtBE via analytical method 602.

2.3.2.2 Remedial Pumping Wells

The January, 2004 Monitoring Plan called for quarterly sampling of remedial wells RW-1S and RW-2D (both associated with Plant 1) and, quarterly sampling of either well P-1 or well P-2

(whichever of the two wells is actively pumping at the time), of which both are associated with Plant 2. Analysis is for the full list of VOCs via EPA analytical method 601 and for MtBE via analytical method 602.

At the present time, Plant 2 is not operating. This is because groundwater extraction from the wells associated Plant 2 was believed to be drawing impacted groundwater from the source area deeper into the bedrock system. As such, operation of Plant 2 was suspended.

2.3.2.3 Meadow Park Road Monitoring Wells

The January, 2004 Monitoring Plan specifies four (4) off-site monitoring wells located in the residential area southeast of the Site on Meadow Park Road for annual sampling. These off-site monitoring wells were originally used as water supplies for residences that have since been connected to the municipal water system. The wells range in depth from 190 feet below grade to 245 feet below grade. The wells are located at the following residences on Meadow Park Road:

- #6 Meadow Park Road (Sorensen Residence);
- #12 Meadow Park Road (Matthews Residence);
- #13 Meadow Park Road (Pepi Residence), and;
- #21 Meadow Park Road (Hale Residence).
-

Purge water associated with sampling at these locations is treated via a portable treatment system, consisting of a cartridge filter (for removal of particulate) and activated carbon (for removal of VOCs). Use of this system without the need for permits has been authorized by the NYSDEC Regional Hazardous Waste Engineer. Treated water from #6 and #12 Meadow Park Road is discharged to the drainage ditch on Route 118 (Miller Road) while treated purge water from #13 and #21 Meadow Park Road is discharged toward the back of those properties. Analysis is for the full list of VOCs via EPA analytical method 601 and for MtBE via analytical method 602.

2.3.2.4 Lake Baldwin Water District

The January, 2004 Monitoring Plan specifies a December, 2001 Preliminary Design Report for VOC Removal at Lake Baldwin Water District as the governing document for monitoring the Lake Baldwin Water District (LBWD). This includes quarterly monitoring of the active supply wells at the well field with specific sampling procedures/frequencies for specific wells indicating a positive detection of site related compounds. The samples were to be collected from specific sampling taps and analysis was for the full list of VOCs via EPA analytical method 502.2.

At the present time, monitoring of the LBWD is no longer a requirement of the monitoring program associated with the Baldwin Place Mall. This is because site related compounds (PCE, TCE and DCE) had not been identified in the LBWD wells for five (5) consecutive years preceding July, 2009. Removal of the LBWD from future routine monitoring was conveyed to the Carmel Town Engineer (Mr. Jack Karrell) in a July 9, 2009 letter from Ms. Janet Brown, P.E. of the

NYSDEC Division of Environmental Remediation (Region 3).

2.3.2.5 Private Potable Wells

The January, 2004 Monitoring Plan identified 16 residential and/or commercial water supply wells located in proximity to the site on Mahopac Avenue, US Route 6, County Line Drive and Meadow Park Road to be included in a quarterly monitoring program. On a case by case basis, NYSDEC could modify the sampling program based on the historic analytical results at any particular location. Additionally, residences/establishments that connected to the municipal water supply were to be eliminated from the sampling program.

In July, 2005, the sampling program was evaluated by NYSDEC, NYSDOH and WCDOH. At that time, the sampling program was revised to include four (4) remaining properties that were not connected to the municipal system and, had at least one positive detection of PCE in previous sampling events. These properties include:

- #256 Mahopac Avenue (Lewis Residence);
- #264 Mahopac Avenue (Coppolecchia/Ramos Residence);
- #57 US Route 6 (Golf Worx), and;
- #13 County Line Drive (Jear Residence).
-

These four (4) locations were to be sampled semi-annually (i.e. 2x/yr) for one year and, then the sampling program would be re-evaluated. One location (Lewis residence, 256 Mahopac Avenue) was later removed from the sampling program (June 1, 2006) because that residence was connected to the municipal water system. The samples collected from these locations were to be analyzed for the full list of VOCs via EPA analytical method 502.2.

A recent communication with the Town of Somers Water Department confirms that the residences and/or businesses located at 256 Mahopac Avenue (Lewis Residence), 57 US Route 6 (Golf Worx) and 13 County Line Drive (Jear Residence) have connected to the municipal water system. However, the residence located at 264 Mahopac Avenue (Coppolecchia/Ramos Residence) has elected to remain disconnected from the municipal system (which is available to this location).

2.3.2.6 Soil Vapor Intrusion Monitoring

Soil Vapor Intrusion (SVI) monitoring is governed by a June 2008 report entitled Report on Sub-Slab Vapor Investigation by Henningson, Durham & Richardson Architecture and Engineering, P.C. (HDR – f.k.a. Lawler, Matusky and Skelly, LLC) of Pearl River, New York. This monitoring program was preceded by a site-wide soil gas investigation in 2007 that identified two buildings on the property (Building 5 and Building 6) where a subsequent SVI study was warranted. The subsequent SVI study (which included sub-slab vapor, indoor air and outdoor air sampling locations in proximity to the former source area) recommended annual SVI sampling at the "Home Goods" store located in Building 6. As such, the current SVI monitoring program for the site involves annual sampling of sub-slab vapor and indoor air associated with the Home Goods

store only.

3.0 REMEDY COMPLIANCE, PERFORMANCE, EFFECTIVENESS AND PROTECTIVENESS

The Site is located at 80 US Route 6 in the Town of Somers, Westchester County, New York. The site is currently known as the Somers Commons Shopping Plaza and consists of approximately 28 acres (Town of Somers Tax Parcel 4.20-1-11) in postal zone 10589. The property is owned by UB Somers, Inc. of Greenwich, Connecticut. In 2011, a bank was constructed on a portion of the property that was previously occupied by a gasoline station. A local Building Permit and Certificate of Occupancy (C.O.) was issued by the Town of Somers for the bank construction. During the reporting period, the property on which the site is situated was not sold, subdivided, merged nor did it undergo a tax map amendment. Other than the aforementioned Building Permit and C.O., the site was not issued any federal, state, and/or local permits.

The November, 1995 ROD imposed engineering controls and monitoring of various environmental media for the site. The current monitoring program for the site is summarized in **Table 1** below. The ROD and monitoring program for the site do not place any restrictions on the current or future use of the property.

Table 1
Current Monitoring Program

Monitoring Program	Frequency*	Matrix	Analysis
GWP&T – Plant 1	Monthly	Groundwater (Influent, Mid-Carbon, Effluent)	VOCs (Full List) via 601 and MtBE via 602
GWP&T – Plant 2	Monthly	Groundwater (Influent, Mid-Carbon, Effluent)	VOCs (Full List) via 601 and MtBE via 602
On-Site Groundwater	Quarterly	Groundwater (MW-5S, MW-7D, and MW-12S	VOCs (Full List) via 601 and MtBE via 602
	Annual	Groundwater (MW-4S, MW-4D, MW-8S, MW-9S, MW-9D)	VOCs (Full List) via 601 and MtBE via 602
Remedial Pumping Wells	Quarterly	Groundwater (RW-1S, RW-2D, P-1** or P-2**)	VOCs (Full List) via 601 and MtBE via 602
Meadow Park Road Monitoring Wells	Annual	Groundwater • #6 MPR (Sorensen); • #12 MPR (Matthews); • #13 MPR (Pepi); • #21 MPR (Hale)	VOCs (Full List) via 601 and MtBE via 602
Private Potable Wells	Quarterly	Groundwater • #256 Mahopac Ave (Lewis); • #264 Mahopac Ave (Coppolecchia/Ramos); • #57 US Rt 6 (Golf Worx); • #13 County Line Dr. (Jear);	VOCs (Full List) via 502.2
Soil Vapor Intrusion	Annual	Soil Vapor/Air (Sub-Slab Vapor, Indoor Air, Outdoor Air – Home Goods @ Building #6)	VOCs (Full List) via TO-15

Notes:
* The frequency of events will be conducted as specified until otherwise approved by NYSDEC.
** Well P-1 is Primary well; well P-2 is secondary well. Sampling from whichever well is active

This current monitoring program will be modified in accordance with a Site Management Plan, which is being developed concurrently with this PRR. This PRR seeks to evaluate each component of the monitoring program outlined in Table 1 above in terms of its compliance,

performance and, effectiveness and protectiveness with respect to the goals of the ROD.

3.1 Groundwater Extraction and Treatment Systems – Plant 1 & Plant 2

As indicated previously, GWE&T at the site is via two (2) treatment facilities. Plant 1 addresses impacted groundwater in proximity to the former source area and Plant 2 was originally the water supply for the former Baldwin Place shopping center. This system was later connected to the Meadow Park Road residential area to provide potable water to those homes until the municipal system was extended to service that area. Plant 2 has since been disconnected from the Meadow Park Road area and, is no longer used as a water supply. Its current purpose is to extract impacted groundwater from within the bedrock system.

3.1.1 Compliance

The monitoring schedule for both treatment plants includes monthly operation and maintenance (O&M) visits to check their operation and, to perform routine maintenance tasks (such as changing filters, making minor adjustments, etc…) as necessary. Monthly visits also include sampling of the system effluent to ensure that the treated groundwater meets the quality standards established for the site. Additional samples of extracted groundwater (system influent) and between carbon are collected in order to evaluate the effectiveness of the GAC units.

At the present time, monthly site visits to Plant 1 are routinely conducted with sampling and routine O&M completed. Additionally, the analytical results of the system effluent samples (**Appendix A**) indicate that VOCs are consistently not detected in the treated water discharged from the system. As such, the discharge from Plant 1 is in compliance with the quality standards established for the site and, the operation of Plant 1 is in compliance with the ROD.

Operation of Plant 2 is currently suspended as requested by NYSDEC. This is because operation of well P-1 (total depth ~260 feet below grade) was believed to be drawing groundwater impacted with site-related VOCs into the bedrock zone. NYSDEC has recently employed the services of MACTEC Engineering and Consulting, P.C. (MACTEC), of Portland, Maine, to review the operational history and effectiveness of Plant 2. The purpose of their review is to provide NYSDEC with their recommendation to either refurbish or decommission Plant 2. MACTEC has recommended, in their September, 2014 RSO, that Plant 2 be decommissioned.

3.1.2 Performance

Monthly site visits (Plant 1) conducted during the period between June, 2012 and April, 2014 have indicated that the operational controls for wells RW-1S and RW-2D have proven to be unreliable. This is because these wells are often not operating for a variety of reasons. Operational data for Plant 1 (which is summarized, tabulated and included in the attached additional summary tables) indicates that well RW-1S has been extracting groundwater at an average rate of 2.01 gallons per minute (GPM) when operational. Well RW-2D has been

extracting groundwater at an average flow rate of 1.96 gpm during this same time period. Collectively, the GWE&T system extracts groundwater at an average rate of 1.97 gpm.

One of the goals of the ROD was to prevent continued degradation of groundwater quality through transfer of PCE and its breakdown products from impacted soil to groundwater. This was partially accomplished via a limited excavation of source area soil. Subsequent to completing the source area excavation, Plant 1 was installed in order to capture vertical and horizontal flow from within and around the source area as well as to capture vertical leakage from the glacial till before it enters the bedrock. Plant 2 was operated in order to capture additional VOCs from the bedrock system.

Based on the fact that there have been frequent issues whereby wells RW-1S and RW-2D are not operational, it does not appear that Plant 1 has been able to continuously operate in a manner that is consistent with the goals of the ROD. However, recent upgrades to the operational controls for wells RW-1S and RW-2D are anticipated to improve the overall operation of Plant 1. Operation of Plant 2 was previously suspended by NYSDEC because its operation may have actually served to draw site-related VOCs deeper into the bedrock system. As such, Plant 2, when it was operating, was not performing in a manner consistent with the goals of the ROD.

3.1.3 Effectiveness and Protectiveness

An evaluation of the analytical results obtained via analysis of the system influent, mid-carbon and effluent samples collected from Plant 1 indicates that the treatment and discharge of groundwater captured by Plant 1 is effective and protective of human health and the environment. This is because the GAC treatment effectively removes the site-related VOCs present in the groundwater extracted via wells RW-1S and RW-2D prior to its discharge into the unnamed stream adjacent to the eastern side of the Site. However, the inconsistent operation of RW-1S and RW-2D (relating to operational control issues) and, the fact that operation of Plant 2 is currently suspended, limits the overall effectiveness and protectiveness of GWE&T at the Site. Recent upgrades to the operational controls for wells RW-1S and RW-2D are anticipated to improve the overall operation of Plant 1 and, as such, improve the effectiveness and protectiveness of GWE&T at the site.

3.2 On-Site Groundwater & Remedial Pumping Wells

The on-site groundwater monitoring program includes quarterly sampling from monitoring wells MW-5S, MW-7D and MW-12S and, remedial pumping wells RW-1S and RW-2D. Monitoring wells MW-4S, MW-4D, MW-8S, MW-9S and MW-9D are sampled annually.

3.2.1 Compliance

During the period between April, 2009 and April, 2014, sporadic groundwater sampling events have been conducted at the site. **Table 2** below summarizes the on-site groundwater sampling

events conducted at the site over the last five (5) years for each on-site monitoring well. As indicated, the site is not currently in compliance with the monitoring schedule outlined therein.

Table 2
Summary of Sampling Events
On-Site Monitoring Wells

Sampling Frequency	Well ID	Number of Sampling Events+	Sampling Dates
Quarterly	MW-5S	2	3-11 & 4-12
	MW-7D	2	3-11 & 4-12
	MW-12S	2	3-11 & 4-12
	RW-1S	5	4-09; 3-11; 4-12; 10-13; & 1-14
	RW-2D	7	4-09; 5-09; 3-11; 4-12; 4-13; 6-13 & 4-14
Annual	MW-4S	1	4-12
	MW-4D	1	4-12
	MW-8S	1	4-12
	MW-9S	1	4-12
	MW-9D	1	4-12

Note:
+ Number of sampling events conducted between April, 2009 and April, 2014

3.2.2 Performance

The most recent complete groundwater monitoring event for the on-site monitoring wells was conducted in April, 2012. This sampling event included sampling of each of the 10 wells included in the monitoring schedule for the site. This includes the three (3) on-site monitoring wells requiring quarterly sampling (MW-5S, MW7D and MW-12S); the two (2) recovery wells associated with GWE&T Plant 1 (RW-1S & RW-2D) and, the five (5) on-site monitoring wells requiring annual sampling (MW-4S, MW-4D, MW8S, MW-9S & MW-9D). Additional samples were also obtained from shallow zone monitoring wells MW-2S and MW-7S and, deep zone monitoring wells MW-2D, MW-3D, MW-3DD and MW-10D.

The groundwater sampling event commenced by first locating and opening the monitoring wells in order to assess the integrity and collect depth to water measurements from each. The depth to water measurements were used in conjunction with top of well casing elevations in order to determine the groundwater elevation for each well. Based on their completion depth and specification, groundwater elevations for wells completed in the shallow zone (MW-4S, MW-5S, MW-7S, MW-8S, MW-9S and MW-12S) and deep zone (MW-2D, MW-3D, MW-4D, MW-7D, MW-9D and MW-10D) were established and used to prepare the groundwater contour maps presented in **Figure 4A** and **Figure 4B** for the shallow and deep zones, respectively.

Based on the groundwater elevations established for the April, 2012 sampling event, the direction of groundwater flow within the Shallow Zone (and in proximity to the former source area) is generally toward the south and southwest (Figure 4A). GWE&T via wells RW-1S and RW-2D (Plant 1) was active at this time. Within the bedrock (Figure 4B), groundwater flow beneath most of the shopping center is generally toward the south with a component of flow toward the west beneath Building No. 3. A northerly component of groundwater flow within

the bedrock is also noted via a relatively high groundwater elevation recorded in well MW-2D, located in the southern portion of the site. The groundwater elevations associated with the April, 2012 sampling event are presented in **Table 3**.

Table 3
Groundwater Elevations
April, 2012

Well ID	Zone	TOC Elevation	DTW	GW Elevation
RW-1S	Shallow	NA	8.71 (xd)	NA
MW-4S	Shallow	609.72	7.36	602.36
MW-5S	Shallow	603.36	9.11	594.25
MW-7S	Shallow	602.07	13.45	588.62
MW-8S	Shallow	618.28	6.77	611.51
MW-9S	Shallow	596.21	8.74	587.47
MW-12S	Shallow	NA	16.83	NA
RW-2D	Deep	NA	9.31 (xd)	NA
MW-2D	Deep	601.66	11.71	589.95
MW-3D	Deep	602.22	16.21	586.01
MW-3DD	Deep	602.22	14.80	587.42
MW-4D	Deep	609.72	12.16	597.56
MW-7D	Deep	602.18	14.45	587.73
MW-9D	Deep	595.99	10.52	585.47
MW-10D	Deep	600.52	14.41	586.11

Notes:
TOC elevations from AECOM PRR Report – August 25, 2011
NA – TOC elevation is not available
(xd) – Measurement via pressure transducer

After completing the depth to water measurements, low flow sampling commenced and was conducted in accordance with USEPA low-flow guidelines. Monitoring wells were purged using a stainless steel submersible pump/control box assembly equipped with dedicated teflon-lined polyethylene tubing. Purging continued at each location until the water quality field parameters (temperature, pH, specific conductance, oxidation/reduction potential and dissolved oxygen) stabilized. Water Quality Field Parameters (WQFPs) were measured in real time and recorded throughout the well purging process.

Groundwater samples were collected subsequent to purging. Samples were transferred into appropriately preserved laboratory supplied containers and stored on ice. Samples were subsequently delivered to Adirondack Environmental Laboratories, Inc, of Albany, New York, where they were analyzed for the full list of VOCs (purgeable halocarbons) via EPA analytical method 601.

The analytical results indicate that detectable concentrations of VOCs were not identified in five (5) of the 10 required wells (MW-4S, MW-8S, MW-4D, MW-7D & MW-9D) and, in one (1) of the six (6) additional wells sampled (MW-7S). PCE was the compound identified in the highest concentration. Lower concentrations of TCE and the isomers of DCE were also identified. PCE concentrations were in excess of the 5.0 microgram per liter (ug/l) standard for Class GA groundwater with concentrations of 7,600 ug/l, 2,800 ug/l, 640 ug/l and 25 ug/l in wells RW-2D, MW-12S, RW-1S and MW-5S, respectively. A summary of the groundwater analytical results for

the April 19 & 20, 2012 sampling event is presented below in **Table 4**.

Table 4
Summary of Groundwater Analytical Results
April 19 & 20, 2012

Well ID	Zone	PCE	TCE	1,1-DCE	Cis-1,2-DCE	Total VOCs
	GW Standard	5.0	5.0	5.0	5.0	
Required Wells:						
RW-1S	Shallow	**640**	**19**	**51**	-	710
MW-4S	Shallow	-	-	-	-	-
MW-5S	Shallow	**25**	3.2	-	1.8	30
MW-8S	Shallow	-	-	-	-	-
MW-9S	Shallow	3.8	-	-	1.4	5.2
MW-12S	Shallow	**2,800**	-	-	-	2,800
RW-2D	Deep	**7,600**	-	-	-	7,600
MW-4D	Deep	-	-	-	-	-
MW-7D	Deep	-	-	-	-	-
MW-9D	Deep	-	-	-	-	-
Additional Wells:						
MW-2S	Shallow	-	-	-	-	-
MW-7S	Shallow	-	**9.0**	-	-	9.0
MW-2D	Deep	-	-	-	-	-
MW-3D	Deep	-	-	-	-	-
MW-3DD	Deep	-	-	-	-	-
MW-10D	Deep	-	-	-	-	-

NOTES:
Concentrations in micrograms per liter (ug/l)
Groundwater Standard from NYSDEC Technical and Operational Guidance Series (TOGS) 1.1.1
NA – A specific standard or guidance value for that compound is not available.
- Indicates that compound was not detected
Concentrations in Bold exceed Groundwater Standard

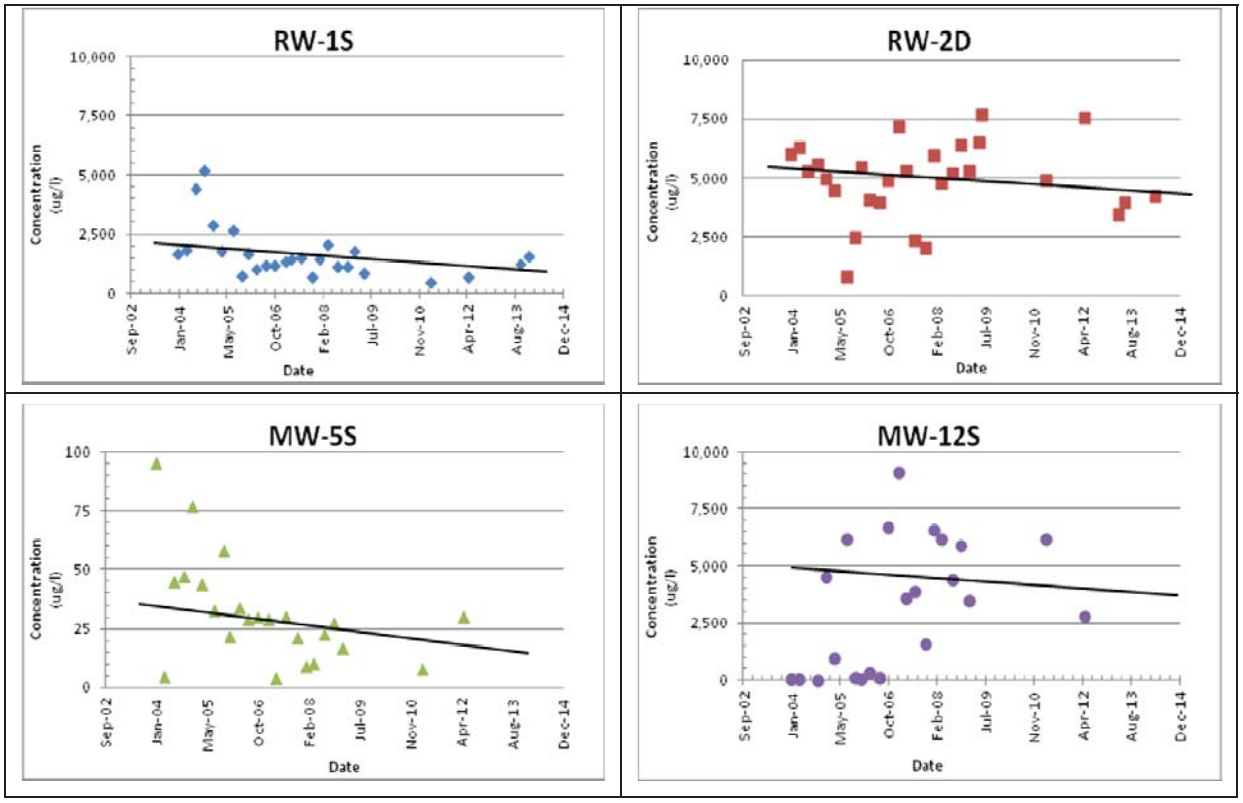
PCE = Tetrachloroethene
TCE = Trichloroethene
DCE = Dichloroethene

The distribution of PCE, TCE and isomers of DCE within both the shallow and deep zones during the April, 2012 sampling event is shown in **Figure 5A** and **Figure 5B**, respectively.

3.2.3 Effectiveness and Protectiveness

The goal of the November, 1995 ROD is to establish a remedial approach for the site that is protective of human health and the environment. Ultimately, the goal for the groundwater at the site would be for groundwater quality to satisfy the standards, criteria and guidance for Class GA groundwater as defined by NYSDEC (TOGS 1.1.1).

A review of the groundwater analytical results obtained from sampling events conducted since 2004 indicates that, in general, total VOC concentrations are following an overall declining trend in groundwater. This overall declining trend in total VOC concentrations is shown in the charts below for groundwater extraction wells RW-1S and RW-2D and on-site monitoring wells MW-5S and MW-12S. Each of these wells is located in proximity to the former source area.



Based on the declines noted, the concentrations of the VOCs identified in groundwater are trending toward the remedial goals for the site. However, the most recent concentrations of PCE in groundwater are currently in excess of the standards, criteria and guidance for Class GA groundwater (TOGS 1.1.1).

3.3 Meadow Park Road Monitoring Wells

The Meadow Park Road monitoring wells are each former residential water supply wells that are no longer used for water supply purposes. This is because these residences have been connected into the municipal water system. Depth to water measurements and completion depths for these former water supply wells are summarized in **Table 5** below.

Table 5
Meadow Park Road Monitoring Well Specifications

Well ID	DTW	Total Depth
# 6 MPR (Sorensen)	29.97	190
# 12 MPR (Matthews)	NA	205
# 13 (Pepi)	42.00	245
# 21 (Hale)	46.45	220

Notes:
Depths given in feet
Wells are 6.0" diameter former residential water supply wells. MPR = Meadow Park Road

3.3.1 Compliance

As indicated previously (Table 1), the Meadow Park Road monitoring wells are scheduled for sampling on an annual basis. The most recent sampling event that included the Meadow Park

Road monitoring wells was conducted during July, 2008. This sampling event was conducted outside of the time period covered by this PRR (April, 2009 through April, 2014). In the absence of any previous recommendations or documentation that modifies the requirement for annual sampling from these locations, it appears that sampling of the Meadow Park Road monitoring wells is not currently in compliance with the monitoring schedule outlined above in Table 1.

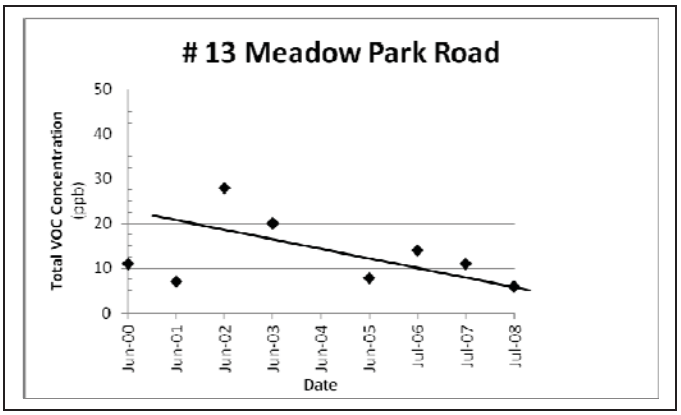
3.3.2 Performance

The most recent groundwater monitoring event for the Meadow Park Road monitoring wells was conducted in July, 2008. A review of the analytical results for that sampling event indicates that concentrations of VOCs are not detected in three (3) of the four (4) locations sampled. At one location (# 13 Meadow Park Road), PCE was identified at a concentration of 6.1 ug/l. This concentration is in excess of the 5.0 ug/l standard for Class GA groundwater (TOGS 1.1.1). No additional sampling events were conducted during the time period covered by this PRR (April, 2009 through April, 2014).

3.3.3 Effectiveness and Protectiveness

The goal of the November, 1995 ROD is to establish a remedial approach for the site that is protective of human health and the environment. Ultimately, the goal for the groundwater at the site would be for groundwater quality to satisfy the standards, criteria and guidance for Class GA groundwater as defined by NYSDEC (TOGS 1.1.1).

A review of the groundwater analytical results obtained from the sampling events conducted since June, 2000 (which is summarized, tabulated and included in the attached additional summary tables) indicates that concentrations of site-related VOCs in three (3) of the four (4) Meadow Park Road Monitoring wells have not exceeded their respective standards established by NYSDEC for Class GA groundwater (TOGS 1.1.1) since June, 2001. PCE concentrations in the former water supply well at 13 Meadow Park Road are typically in excess of the NYSDEC standard (5.0 ug/l). The chart below demonstrates the trend in total VOC concentration at this location during the sampling events conducted between June, 2000 and July, 2008.



Based on the fact that total VOC concentrations in three (3) of the four (4) Meadow Park Road monitoring wells have been below NYSDEC standards for class GA groundwater since June, 2001 and, the noted declines in the former water supply well located at 13 Meadow Park Road, the concentrations of the VOCs identified in off-site groundwater are trending toward the remedial goals for the site.

3.4 Private Water Supply Wells

In July, 2005 the sampling program for nearby private water supply wells was revised to include four (4) properties that were not connected to the municipal system and, had at least one positive detection of PCE in previous sampling events. These properties included:

- #256 Mahopac Avenue (Lewis Residence);
- #264 Mahopac Avenue (Coppolecchia/Ramos Residence);
- #57 US Route 6 (Golf Worx), and;
- #13 County Line Drive (Jear Residence).

A recent communication with the Town of Somers Water Department confirms that the residences and/or businesses located at 256 Mahopac Avenue (Lewis Residence), 57 US Route 6 (Golf Worx) and 13 County Line Drive (Jear Residence) have connected to the municipal water system. The residence located at 264 Mahopac Avenue (Coppolecchia/Ramos Residence) has elected not to connect to the municipal system (which is available to this location). As such, the current sampling program for nearby private water supply wells includes 264 Mahopac Avenue (Coppolecchia/Ramos residence) only; all other residences have been connected to the local municipal system.

3.4.1 Compliance

As indicated previously in Table 1, the sampling program for nearby private water supply wells was modified by NYSDEC, NYSDOH and WCDOH in July, 2005. Under that revised sampling program, the four (4) private water supply wells would be sampled semi-annually for one year, followed by re-evaluation. Residences would be connected to the municipal water supply once it became available. A recent communication with the Town of Somers water department confirms that three (3) of the four (4) residences have been connected to the municipal water system. As such, removal of these three (3) residences (256 Mahopac Avenue, 57 US Route 6 and 13 County Line Drive) is compliant with the November, 1995 ROD. However, the most recent data available for sampling events associated with 264 Mahopac Avenue is from April, 2009. As such, in the absence of any previous recommendations or documentation that modifies the sampling schedule for this location, it appears that the sampling of the private water supply well at 264 Mahopac Avenue is not currently in compliance with the monitoring schedule.

3.4.2 Performance

The most recent monitoring event for the private water supply well at 264 Mahopac Avenue was conducted in April, 2009. A review of the analytical results for that sampling event

indicates that concentrations of VOCs are not detected on that date. No additional sampling events were conducted during the time period covered by this PRR (April, 2009 through April, 2014).

3.4.3 Effectiveness and Protectiveness

The goal of the November, 1995 ROD is to establish a remedial approach for the site that is protective of human health and the environment. Ultimately, the goal for the groundwater at the site would be for groundwater quality to satisfy the standards, criteria and guidance for Class GA groundwater as defined by NYSDEC (TOGS 1.1.1).

A review of the groundwater analytical results obtained from 51 sampling events (dating back to March, 2000) from the private water supply well located at 264 Mahopac Avenue indicate that PCE concentrations, when detected, have ranged from a low concentration of 0.5 ug/l to a high concentration of 1.8 ug/l. PCE was "not detected" in 43 of 51 sampling events. The historic water supply samples collected from 264 Mahopac Avenue have not exceeded the NYSDEC standards for class GA groundwater dating back to March, 2000 and, as such, are meeting the remedial goals established by the November, 1995 ROD.

3.5 Soil Vapor Intrusion Monitoring

SVI monitoring is governed by the June 2008 Report on Sub-Slab Vapor Investigation by HDR (f.k.a. Lawler, Matusky and Skelly, LLC) of Pearl River, New York. This includes annual SVI sampling of sub-slab vapor, indoor air and outdoor air associated with the "Home Goods" store (Building 6). This location is adjacent to (and south of) the former source area.

3.5.1 Compliance

As indicated previously in Table 1, the SVI monitoring program includes annual sampling (to be conducted during the heating season) via two (2) sub-slab locations (SS-03 & SS-04), two (2) indoor air locations (IA-03 & IA-04) and, one (1) outdoor air location (OA-01). The SVI sampling locations for the sub-slab and indoor air samples are within Building 6 of the shopping center at the "Home Goods" store (see Figure 3); the outdoor air sample is collected from within the fenced compound associated with Plant 1.

At the present time, three (3) sets of annual SVI data are available for the time period between January, 2009 and January, 2014. These include data sets collected January 19, 2009, January 17, 2013 and January 19, 2014. As such, SVI data sets for 2010, 2011 and 2012 are not currently available. Based on the fact that the current monitoring schedule requires annual SVI monitoring, it appears that the site has been out of compliance with the monitoring schedule for 2010, 2011 and 2012.

3.5.2 Performance

The most recent set of SVI samples was collected on January 19, 2014. The sub-slab samples were collected from two (2) previously installed sub-slab sampling points that are located in the

hallway leading to the rest rooms in the northeast corner of the Home Goods store (sample SS-03 – located due south of the former source area) and, within the storage room of the Home Goods store at a location that is positioned approximately midway (and adjacent to) the eastern wall of Building 6 (SS-04). Corresponding indoor air samples (IA-03 and IA-04, respectively) were also collected at each location. An outdoor air sample (OA-1) was also collected from within the fenced area associated with Plant 1.

The samples were collected via 6.0-liter summa canisters over an approximate 6.0-hour duration and shipped to Test Americas' Knoxville, Tennessee laboratory where they were analyzed via analytical method TO-15 for the full list of VOCs. The analytical results of that sampling event are summarized and presented below in **Table 6**.

Table 6
Summary of Soil Vapor Intrusion Monitoring
January 19, 2014

Compound	Home Goods - Hallway		Home Goods – Storage Room		Outdoor Air	Matrix
	SS-03 (sub-slab)	**IA-03** (Indoor Air)	**SS-04** (sub-slab)	**IA-04** (Indoor Air)	**OA-1**	
Carbon Tet	ND	ND	ND	0.14	0.44	Matrix 1/NFA
PCE	230	ND	190	ND	ND	Matrix 2/Monitor
1,1,1-TCA	ND	0.43	ND	ND	ND	Matrix 2/NFA
TCE	4.90	ND	1.50	ND	ND	Matrix 1/NFA

NOTES:
Concentrations in micrograms per cubic meter (ug/m^3)
Carbon Tet = Carbon Tetrachloride
PCE = Tetrachloroethene
NFA = No Further Acton
TCA = Trichloroethane
TCE = Trichloroethene
ND = Not Detected
Matrix = Decision matrix per NYSDOH Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York (October, 2006)

As indicated in Table 6, NYSDOH decision matrix No. 1 suggests that "no further action" is an appropriate response to the concentrations of carbon tetrachloride and TCE identified in the January, 2014 SVI monitoring and, decision matrix No. 2 suggests "no further action" as an appropriate response to 1,1,1-trichloroethane (TCA). Conversely, decision matrix No. 2 suggests that continued monitoring is the appropriate course of action with respect to the concentrations of PCE identified in the January, 2014 SVI monitoring.

3.5.3 Effectiveness and Protectiveness

The goal of the November, 1995 ROD is to establish a remedial approach for the site that is protective of human health and the environment. As part of that remedial approach, the goal for the SVI monitoring would be to meet the criteria established via decision matrices no. 1 and no. 2 with respect to protection of indoor air quality.

A review of the four (4) available sets of SVI monitoring data (which is summarized, tabulated and included in the attached additional summary tables) indicates that the results obtained via the January, 2014 SVI monitoring are consistent with the historic SVI sampling. Based on the fact that the decision matrices have not historically indicated "mitigation" as an appropriate

course of action, the current SVI monitoring program for the site is consistent with NYSDOH guidance and, is protective of human health and the environment. As such, the current SVI monitoring program is meeting the goals of the November, 1995 ROD.

4.0 EVALUATION OF COSTS

The cost evaluation included herein summarizes NYSDEC expenditures over the two (2) year period between April, 2012 and March, 2014. The costs are broken down into five (5) categories. These include:

- System Operation and Maintenance. This includes routine monthly site visits, non-routine maintenance visits and, analytical costs via Adirondack Environmental Services, Inc. (Adirondack). The costs indicated below are associated with operation of Plant 1.
- GW Monitoring. This includes labor, materials and miscellaneous costs associated with sampling of on-site groundwater. Analytical costs via Adirondack are also included.
- SVI Monitoring. This includes labor, materials and miscellaneous costs associated with SVI sampling. Analytical costs are directly billed to NYSDEC via the contract laboratory (Test America).
- Utilities. This includes electrical costs for operation of Plant 1. Electrical costs for Plant 2 are also included. However, these costs are minimal as Plant 2 has not been operational during this time period.
- Other. This includes labor costs for unforeseen site visits, reporting and meetings.

4.1 Approximate Costs: April, 2012 through March, 2014

The approximate costs associated with the time period between April, 2012 and March, 2014 are presented in **Table 7** below.

Table 7
Approximate Costs: April, 2012 through March, 2014

Task	Approximate Cost
System Operation & Maintenance	$32,800.00
Groundwater Monitoring	$5,375.00
Soil Vapor Intrusion Monitoring	$6,075.00
Utilities	$6,400.00
Other	$8,275.00
Total:	$58,925.00

4.2 Anticipated Costs: Operation and Maintenance and Future Environmental Monitoring

The costs anticipated for the site in the future are based on the recommendations presented in Section 6.0 of this Periodic Review Report. These recommendations are consistent with the environmental monitoring plan that will be presented in the Site Management Plan that is concurrently in preparation by MACTEC. The various elements of the environmental monitoring plan for the site are as follows:

- GWE&T System – Plant 1: Monthly routine operation and maintenance site visits with monthly sampling.
- On-Site Groundwater Monitoring: Quarterly sampling of four (4) on-site monitoring wells and annual sampling of 12 additional monitoring wells.
- Off-Site Groundwater Monitoring – Meadow Park Road Monitoring Wells: Annual sampling of four (4) off-site monitoring wells in the Meadow Park Road residential area.

- Private Potable Wells – 264 Mahopac Avenue: One (1) sampling of the water supply well at this location.
- SVI Monitoring: Annual sampling of sub-slab vapor and indoor air at two (2) locations within Building 6 (Home Goods store) of the Somers Common shopping center and, outdoor air at one (1) location.

The estimated costs associated with implementing the operation and maintenance of Plant 1 and, the environmental monitoring program are summarized below in **Table 8**.

Table 8
Estimated Costs – Operation & Maintenance and Environmental Monitoring

Task	Estimated Cost (per event)	Estimated Cost (Annual)
GWE&T System O&M – Plant 1		
Labor	$1,000.00	
Equipment/Materials	$325.00	$22,800.00
Utilities	$400.00	
Analytical	$175.00	
GWE&T System – Plant 1 Total:	$1,900.00 (per month)	(12 events)
On-Site GW Monitoring – Quarterly		
Labor	$800.00	
Equipment/Materials	$300.00	$3,825.00
Analytical	$175.00	
On-Site GW Monitoring – Quarterly Total:	$1,275.00 (per event)	(3 events)
On-Site GW Monitoring – Annual		
Labor	$1,850.00	
Equipment/Materials	$1,050.00	$3,575.00
Analytical	$675.00	
On-Site GW Monitoring – Annual Total:	$3,575.00 (per event)	(1 event)
Off-Site GW Monitoring – Meadow Park Road		
Labor	$1,250.00	
Equipment/Materials	$2,500.00	$3,925.00[+]
Analytical	$175.00	
Off-Site GW Monitoring – Meadow Park Road Total:	$3,925.00 (per event)	(1 event)
Off-Site GW Monitoring – 264 Mahopac Avenue		
Labor	$775.00	
Equipment/Materials	$600.00	$2,350.00
Analytical	$975.00	
Off-Site GW Monitoring – 264 Mahopac Avenue Total:	$2,350.00 (per event)	(1 event)
SVI Monitoring – Home Goods Store - Annual		
Labor	$900.00	
Equipment/Materials	$275.00	$2,425.00
Analytical[++]	$1,250.00	
SVI Monitoring – Home Goods Store – Annual Total:	$2,425.00 (per event)	(1 event)
Reporting:		
Quarterly Report	$1,750.00 (per report)	$10,500.00
Periodic Review Report (Annual)	$3,500.00 (per report)	(4 quarterly + 1 PRR)

Note:
+ Once analytical meets NYSDEC standards for class GA groundwater, wells will be sampled quarterly with data usability report
++ Estimated cost for 5 samples – Actual costs are direct billed to NYSDEC via Test America.

Based on the costs and assumptions presented herein, the estimated annual cost for the

project is $49,400.00 (using the existing contract rates for 2014). This cost does not include any currently unforeseen tasks associated with non-routine maintenance and/or repairs to GWE&T Plant 1 (or Plant 2), or any modifications to the environmental monitoring plan. In particular, if off-site groundwater monitoring in the Meadow Park Road residential area indicates groundwater quality within the standards for Class GA groundwater established by NYSDEC, then subsequent quarterly sampling events will commence with Category B deliverables and, preparation of a data usability report for each sampling event.

5.0 SUMMARY/CONCLUSIONS

The periodic review process is undertaken in order to determine if a site is being managed in accordance with the remedies established in its governing documents. In particular, the periodic review report seeks to evaluate pertinent site-specific inspection, monitoring, and other related data, that will help to assess whether the remedies (engineering and/or institutional controls) for a site are being implemented properly and, if those remedies remain protective of human health and the environment.

- The November, 1995 ROD imposed Engineering Controls for the site that initially included operation and maintenance of POET systems on residential and commercial water supply wells and/or development of a new water district (using the supply wells for the shopping center) until the regional municipal system would be available in the area. Engineering controls also included groundwater extraction and treatment via two (2) separate GWE&T remedial systems (Plant 1 and Plant 2).
- Institutional controls imposed by the November, 1995 ROD include groundwater monitoring via various monitoring wells, former off-site water supply wells and current water supply wells.
- Annual SVI monitoring at a commercial establishment in proximity to the former source area (Home Goods store) would be a requirement added to the monitoring program for the site in 2008.
- The ROD and monitoring program for the site do not place any restrictions on the current or future use of the property.
- During the years since the effective date of the ROD, operation and maintenance of individual POET systems has ceased. This is because one of the long term goals of the ROD was the connection of nearby residences and commercial establishments to the regional municipal system once it became available.
- The ROD identified PCE and its degradation by-products as the primary site-related compounds of concern.
- A source area excavation was conducted at the site in February, 1997. This included removal of approximately 135 cubic yards of source area soil from the area located behind (east) of the former dry cleaning operation. Altogether, 236 tons of impacted soil was removed. The former source area is currently presented as a lawn area on the north side of the Home Goods store.
- The current monitoring program for the site is governed by the January, 2004 Plan for Routine Groundwater Monitoring prepared by Lawler, Matusky & Skelly Engineers, LLP of Pearl River, New York; SVI monitoring is governed by a June 2008 report entitled Report on Sub-Slab Vapor Investigation by HDR (f.k.a. Lawler, Matusky and Skelly, LLC).
- A Site Management Plan, which is concurrently being developed with this PRR, will be

the document governing all future site monitoring and reporting once it is finalized.

- Engineering Controls for the site include GWE&T via two (2) treatment facilities. Plant 1 addresses impacted groundwater in proximity to the former source area and Plant 2 was the original water supply for the former Baldwin Place Mall. This system is no longer used as a water supply but, is able to extract impacted groundwater from within the bedrock system.
- Based on the frequent control issues limiting the continuous operation of wells RW-1S and RW-2D, Plant 1 has not consistently operated in a manner that satisfies the goals of the ROD. Recent control upgrades are expected to improve the overall operation of Plant 1.
- An evaluation of the analytical results obtained via analysis of the system influent, mid-carbon and effluent samples indicates that the treatment and discharge of groundwater captured by Plant 1 is effective and protective of human health and the environment.
- Operation of Plant 2 was previously suspended by NYSDEC. This is because its operation may have actually served to draw site-related VOCs deeper into the bedrock system. As such, Plant 2, when it was operating, was not performing in a manner consistent with the goals of the ROD.
- NYSDEC has recently employed the services of MACTEC to review the operational history and effectiveness of Plant 2. The purpose of their review is to provide NYSDEC with their recommendation to either refurbish or decommission Plant 2. MACTEC has recommended, in their September, 2014 RSO, that Plant 2 be decommissioned.
- The current monitoring program for the site includes routine sampling of various media. This includes: quarterly sampling of on-site groundwater via wells MW-5S, MW-7D, MW-12S, RW-1S and RW-2D; annual sampling of on-site groundwater via wells MW-4S, MW-4D, MW-8S, MW-9S and MW-9D; annual sampling of off-site groundwater via former water supply wells located southeast of the site on Meadow Park Road (residence #6, #12, #13 and #21); a private residential water supply well located at 264 Mahopac Avenue, and; annual SVI monitoring in Building 6 (Home Goods store) of the current Somers Commons shopping center.
- The site has been out of compliance with the monitoring program established via the January, 2004 Plan for Routine Groundwater Monitoring and, the June 2008 Report on Sub-Slab Vapor Investigation. However, an evaluation of the available data collected under the current monitoring program indicates that the current management of the site is protective of human health and the environment.
- On-site groundwater – quarterly sampling: Two (2) complete sets of quarterly samples have been collected from on-site wells MW-5S, MW-7D, MW-12S, RW-1S and RW2D during the time period reported herein. Additional sets of samples have been collected from well RW-1S (3-sets) and RW-2D (5-sets). An overall downward trend in

concentration was noted in each of these wells in samples collected over the past 10 years. These downward trends suggest that on-site groundwater quality is approaching the remedial goals of the ROD.

- On-site groundwater – annual sampling: One complete set of annual samples have been collected from on-site wells MW-4S, MW-4D, MW-8S, MW-9S and MW-9D during the time period reported herein. An evaluation of the analytical results available for these on-site locations indicates that (when identified) individual VOC concentrations over the past 10 years have been below their respective standards established by NYSDEC for class GA groundwater (TOGS 1.1.1). As such, on-site groundwater quality at these locations is consistent with the remedial goals of the ROD.

- Off-site groundwater – Meadow Park Road: The most recent sampling event that included the Meadow Park Road monitoring wells was conducted during July, 2008 (outside of the period of this PRR). A review of groundwater analytical results dating back to June, 2000 indicates that concentrations of site-related VOCs in three (3) of the four (4) Meadow Park Road monitoring wells have not exceeded their respective standards established by NYSDEC for Class GA groundwater since June, 2001. In the remaining well (located at 13 Meadow Park Road) PCE concentrations are typically in excess of the 5.0 ug/l NYSDEC standard but, an established downward trend at this location indicates that off-site groundwater quality in the Meadow Park Road area is trending toward the remedial goals for the site.

- Private potable wells: In July, 2005 the sampling program for nearby private potable wells was revised to include four (4) properties that were not connected to the municipal system and, have had at least one positive detection of PCE in previous sampling events. However, a recent communication with the Town of Somers water department confirmed that three (3) of these residences and/or businesses have connected to the municipal water system. The remaining residence (located at 264 Mahopac Avenue) elected not to connect to the municipal system.

  The most recent monitoring event for the private water supply well at 264 Mahopac Avenue was conducted in April, 2009. A review of the analytical results for that sampling event indicates that concentrations of VOCs are not detected on that date. Additionally, a review of the groundwater analytical results obtained from 50 previous sampling events (dating back to March, 2000) from that location indicate that PCE concentrations were “not detected” in 43 of those sampling events. When detected, PCE concentrations have never exceeded 1.8 ug/l. Therefore, the historic water supply samples collected from 264 Mahopac Avenue have never exceeded the NYSDEC standard for class GA groundwater dating back to March, 2000 and, as such, are meeting the remedial goals established by the November, 1995 ROD.

- Soil Vapor Intrusion: Three (3) sets of SVI sampling have been conducted at Building 6 of the shopping center (Home Goods store) during the time period reported herein. The

most recent set of SVI samples were collected on January 19, 2014. A comparison of the SVI data to the NYSDOH decision matrix No. 1 suggests that "no further action" is an appropriate response to the concentrations of carbon tetrachloride, and TCE identified in the January, 2014 SVI monitoring and, decision matrix No. 2 suggests "no further action" with respect to 1,1,1-trichloroethane (TCA). Conversely, decision matrix No. 2 suggests that continued monitoring is the appropriate course of action with respect to the concentrations of PCE identified in the January, 2014 SVI monitoring. These results are consistent with the historic SVI monitoring.

Based on the fact that the decision matrices have not historically indicated "mitigation" as an appropriate course of action, the current SVI monitoring program for the site is protective of human health and the environment. As such, the current SVI monitoring program is meeting the goals of the November, 1995 ROD.

6.0 RECOMMENDATIONS

- An SMP is concurrently under development at this time. This document should be finalized and implemented as the controlling document that governs environmental monitoring for the site.

- Operational controls for groundwater recovery wells RW-1S and RW-2D were recently upgraded. As such, GWE&T Plant 1 should continue to be operated for the purpose of capturing groundwater flowing through (and impacted by) residual source area soil before it can enter deeper into the glacial till and bedrock systems. Monthly site visits to conduct routine maintenance and collection of GWE&T system influent, mid-carbon and effluent samples should continue until operation of Plant 1 is no longer necessary.

- A September, 2014 RSO conducted by MACTEC recommends that Plant 2 be decommissioned. Aztech concurs with that recommendation.

- The current monitoring program for on-site groundwater should continue with quarterly sampling from wells MW-5S, MW-12S, RW-1S and RW-2D and, annual sampling from wells MW-4S, MW-4D, MW-7D, MW-8S, MW-9S and MW-9D. Aztech is recommending that wells MW-2S, MW-2D, MW-3D, MW-3DD, MW-7S and, MW-10D be added to the annual sampling program for on-site groundwater.

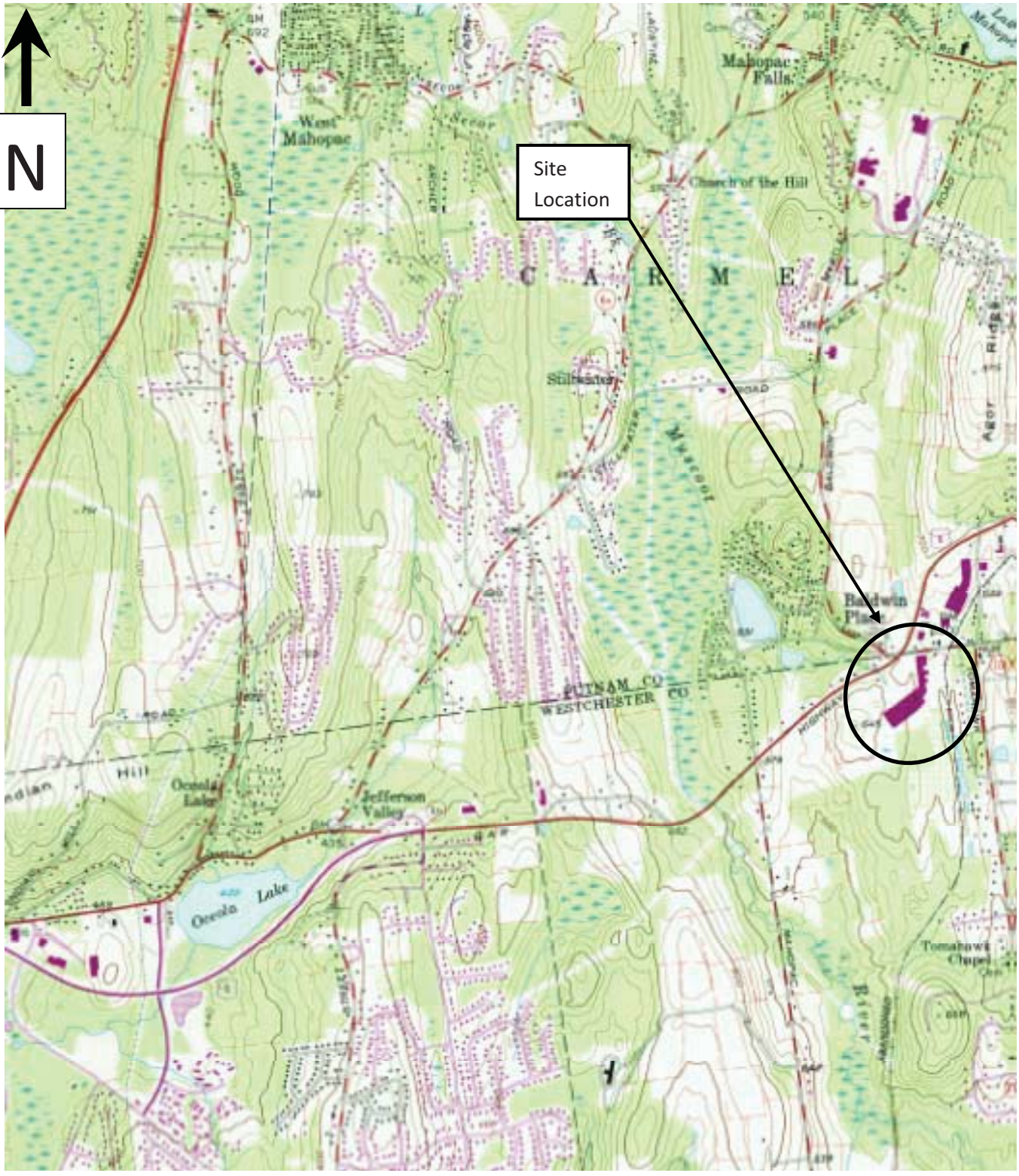
- The current monitoring program for the off-site monitoring wells (i.e. wells located southeast of the site in the Meadow Park Road residential area) should resume on an annual basis until such time that the analytical results for all four (4) wells meet the NYSDEC standards for class GA groundwater with respect to site-related VOCs. Once the analytical results are determined to meet the NYSDEC standards for class GA groundwater, these locations should be sampled on a quarterly basis with the resulting data reported with "Category B" deliverables. A data usability report (DUSR) should be prepared from the data in order to verify the VOC concentrations in the off-site groundwater. Off-site wells will be considered for abandonment once it has been demonstrated that groundwater samples meet the NYSDEC standards for class GA groundwater in four (4) consecutive quarterly sampling events.

- The current monitoring program for private water supply wells includes sampling of the water supply associated with the property at 264 Mahopac Avenue. This location is west of the current shopping center. This location has not been connected to the municipal system. Aztech recommends that one final sample be collected from this location. The laboratory should be requested to provide the analytical report in "Category B" format so that a DUSR can be prepared. If analytical results are consistent with historic analytical results from this location (i.e. PCE concentrations less than or equal to 1.8 ug/l), then NYSDEC may wish to consider removing the sampling of this private water supply well from the monitoring program.

- The current SVI monitoring program for the site includes sub-slab and indoor air

samples collected on an annual basis at two locations within Building 6 (Home Goods store) of the Somers Common shopping center and, one outdoor air location. A comparison of the PCE concentrations with the guidance provided by NYSDOH in their decision matrix No. 2 suggests that continued monitoring is the appropriate course of action. As such, continued annual SVI monitoring is recommended.

FIGURES AND ADDITIONAL SUMMARY TABLES



USGS Topographic Quadrangle Map – Mohegan Lake

Approximate Scale 1:31,000

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SITE: NYSDEC – Site # 3-60-023
Baldwin Place Shopping Center
(now Somers Commons)
Somers, New York

FIGURE 1

Site Location Map

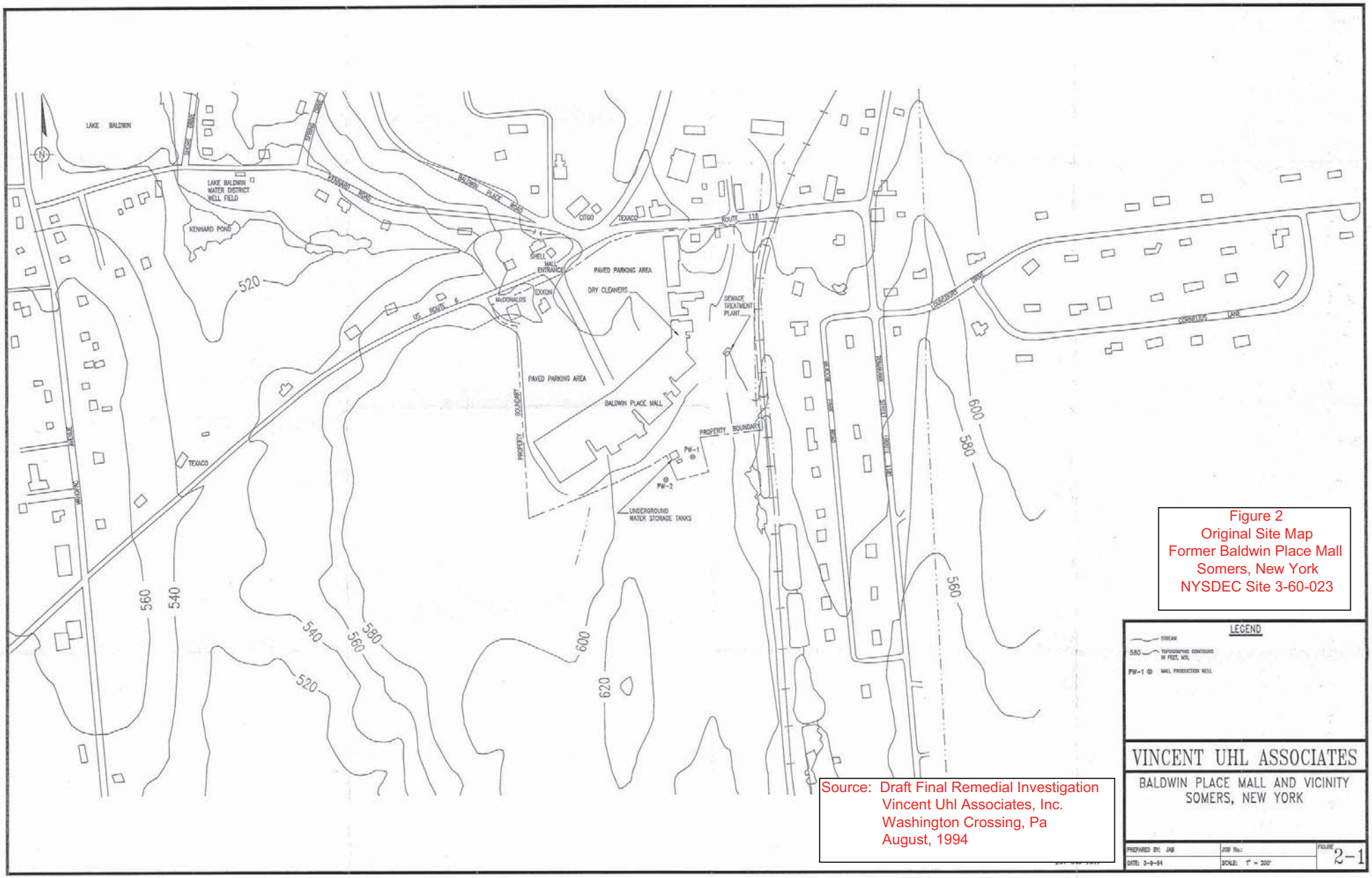
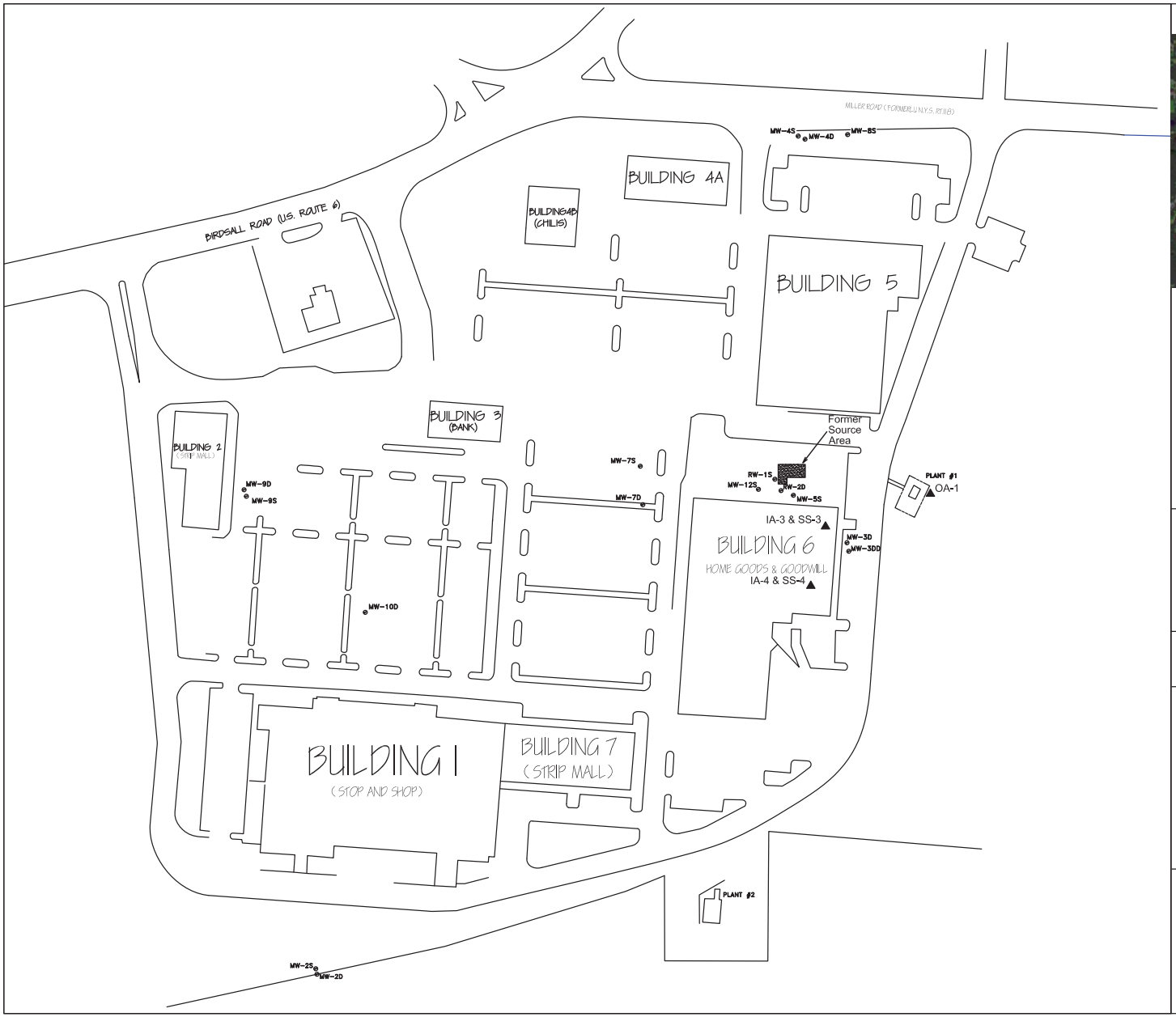


Figure 2
Original Site Map
Former Baldwin Place Mall
Somers, New York
NYSDEC Site 3-60-023

Source: Draft Final Remedial Investigation
Vincent Uhl Associates, Inc.
Washington Crossing, Pa
August, 1994



AREA MAP

LEGEND:

- Groundwater Monitoring Well
- SVI Sample Location

BALDWIN PLACE SHOPPING CENTER
(now SOMERS COMMONS)
80 ROUTE 6 BALDWIN PLACE
WESTCHESTER COUNTY, NEW YORK
NYSDEC SPILL NO. 360023

SITE MAP

FIGURE 3

N
W
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S

NOT TO SCALE

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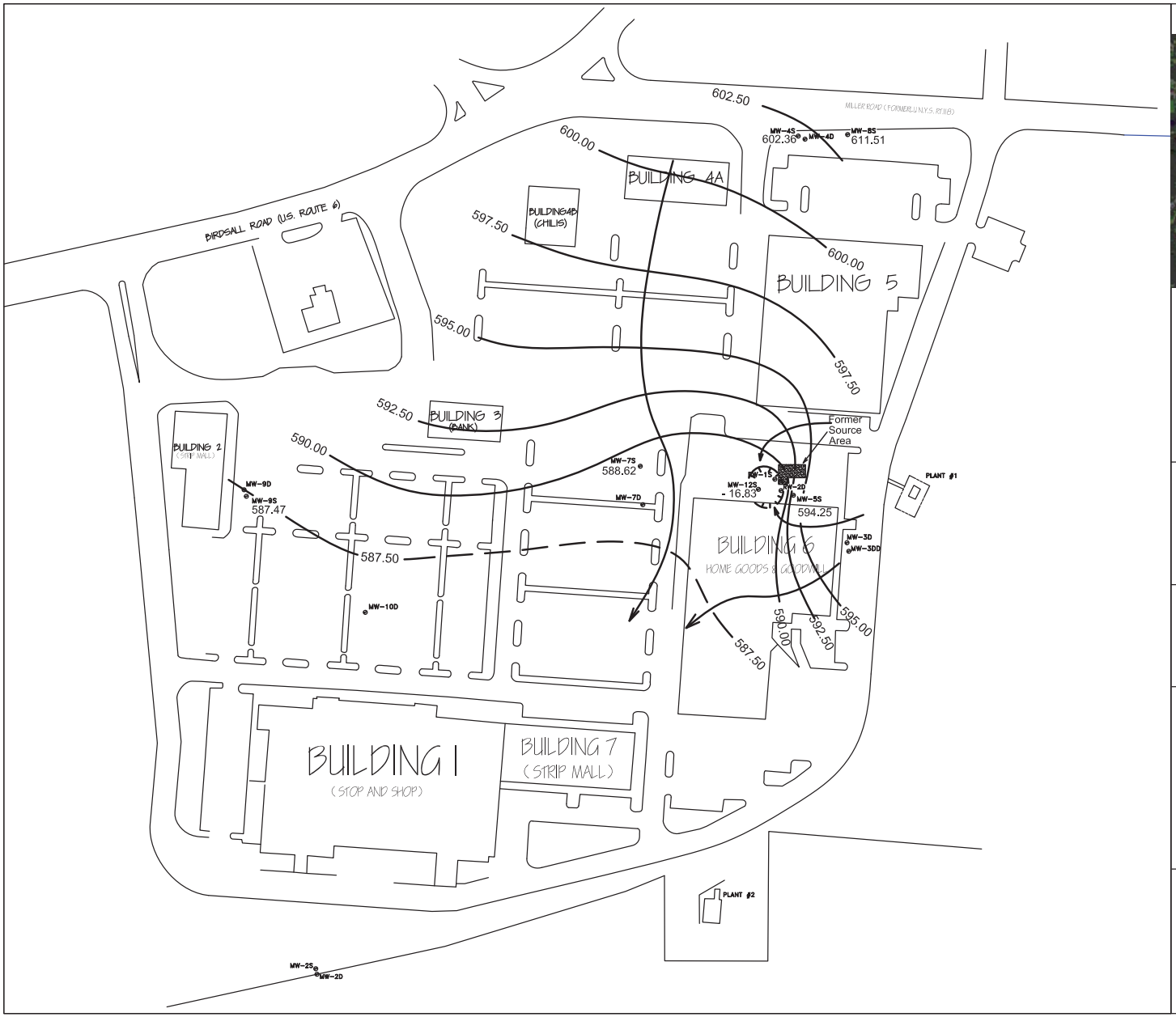

AREA MAP

LEGEND:

Groundwater Monitoring Well

BALDWIN PLACE SHOPPING CENTER
(now SOMERS COMMONS)
80 ROUTE 6 BALDWIN PLACE
WESTCHESTER COUNTY, NEW YORK
NYSDEC SPILL NO. 360023

Groundwater Contour Map
Shallow Zone

N
W
E
S

Figure 4A

April 20, 2012

NOT TO SCALE

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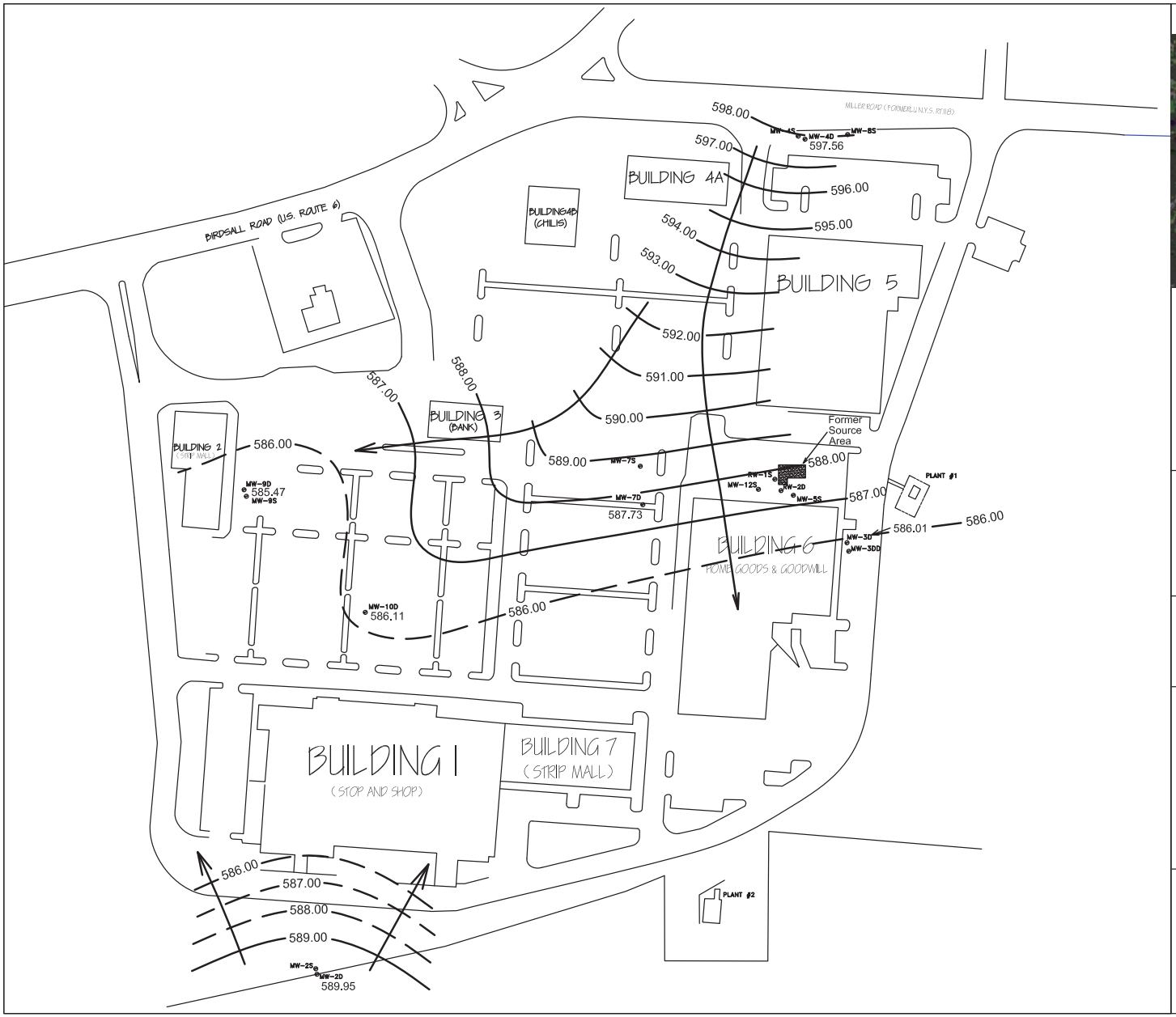

AREA MAP

LEGEND:

Groundwater Monitoring Well

BALDWIN PLACE SHOPPING CENTER
(now SOMERS COMMONS)
80 ROUTE 6 BALDWIN PLACE
WESTCHESTER COUNTY, NEW YORK
NYSDEC SPILL NO. 360023

Groundwater Contour Map
Deep Zone

N
W
E
S

Figure 4B

April 20, 2012

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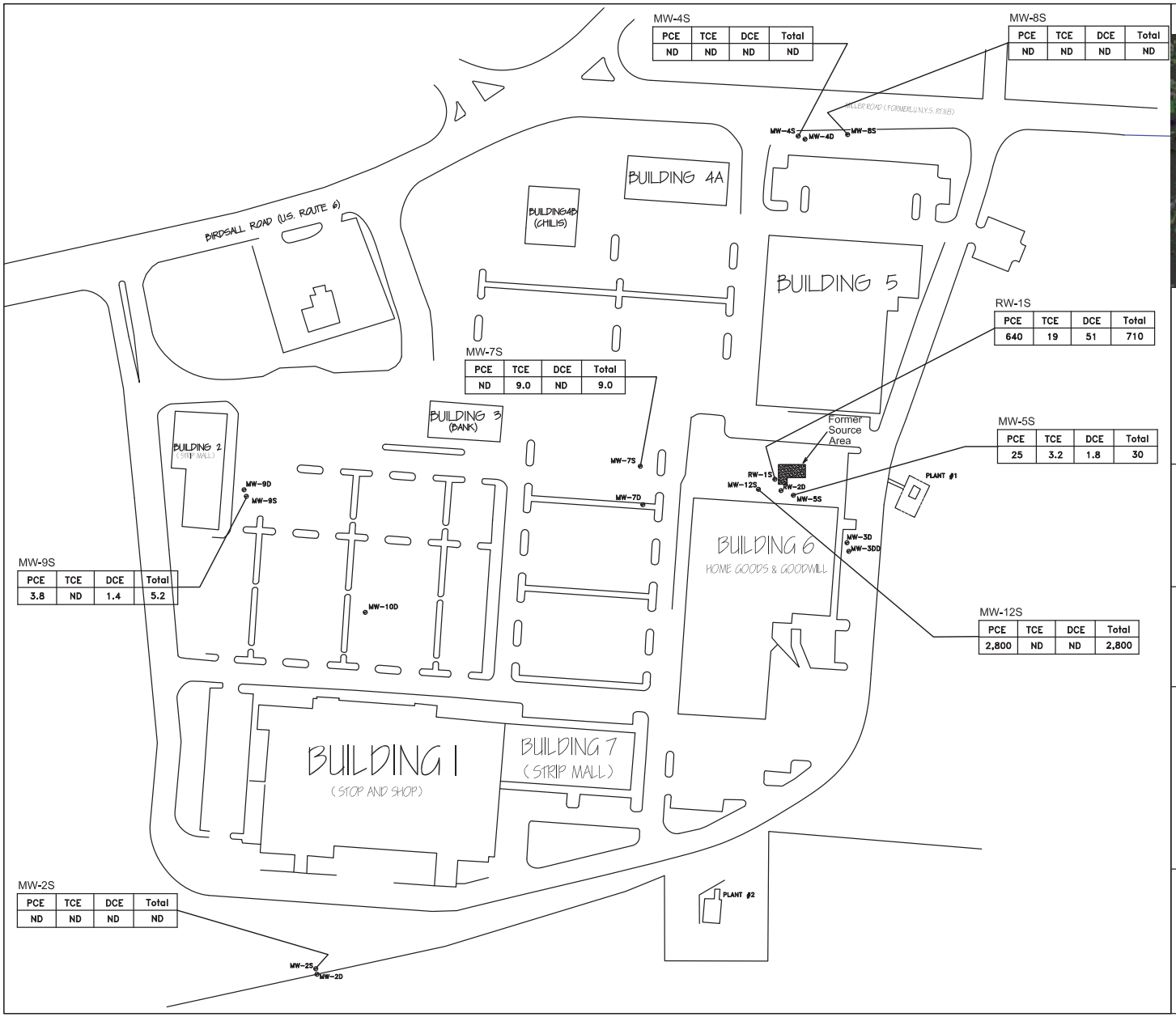

AREA MAP

LEGEND:

Groundwater Monitoring Well

Concentrations in micrograms per liter (ug/l)

BALDWIN PLACE SHOPPING CENTER
(now SOMERS COMMONS)
80 ROUTE 6 BALDWIN PLACE
WESTCHESTER COUNTY, NEW YORK
NYSDEC SPILL NO. 360023

Total VOC Distribution Shallow Zone

N W E S

Figure 5A

April 20, 2012

NOT TO SCALE

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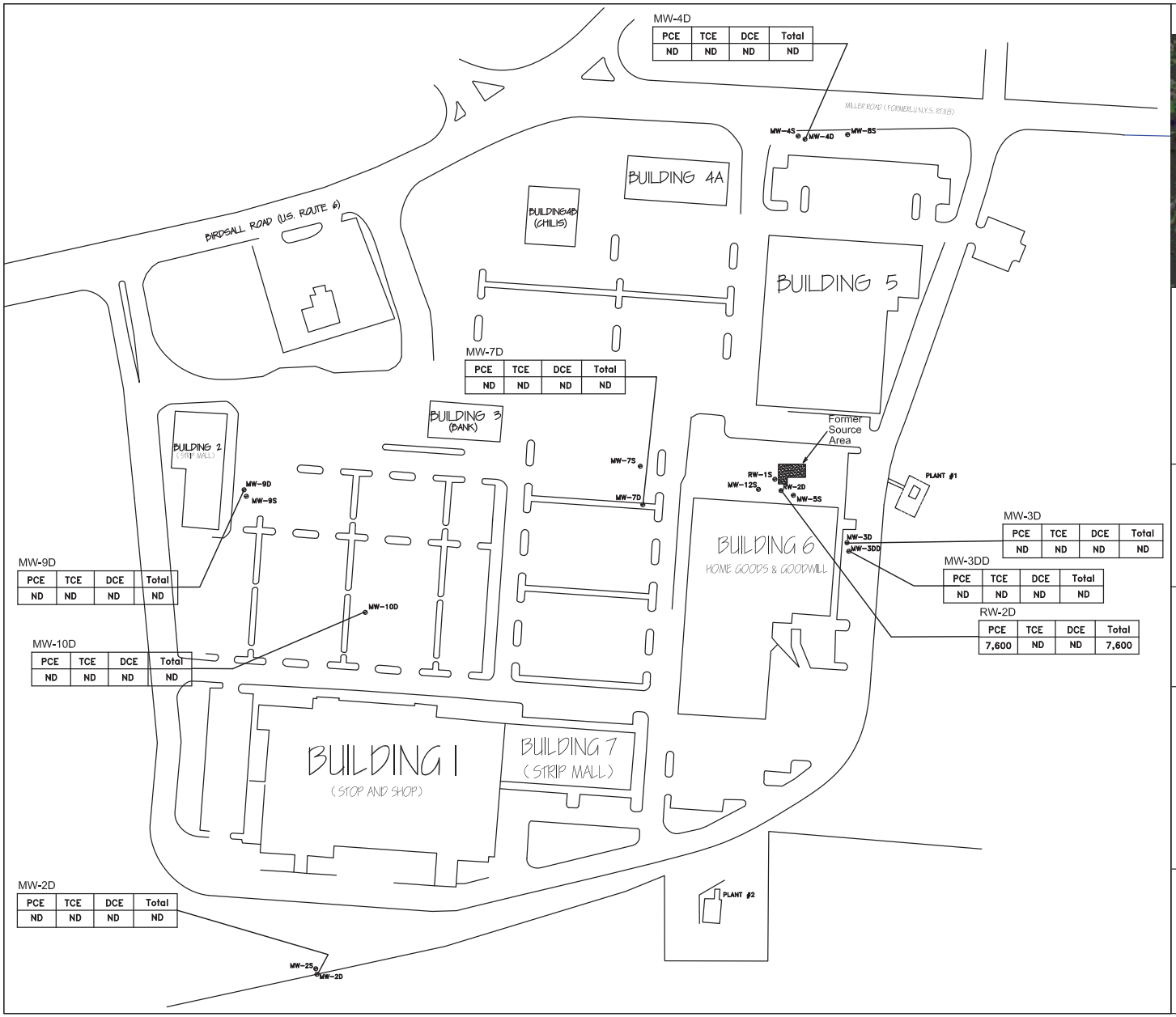

AREA MAP

LEGEND:

Groundwater Monitoring Well

Concentrations in micrograms per liter (ug/l)

BALDWIN PLACE SHOPPING CENTER
(now SOMERS COMMONS)
80 ROUTE 6 BALDWIN PLACE
WESTCHESTER COUNTY, NEW YORK
NYSDEC SPILL NO. 360023

Total VOC Distribution Deep Zone

N W E S

Figure 5B

April 20, 2012

NOT TO SCALE

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Summary of Treatment System Analytical Results

Plant-1

Baldwin Place Shopping Center (now Somers Commons)

Somers, Ney York

NYSDEC Site No. 3-60-023

Date	Compound				Total VOC	Note
	DCE	TCE	PCE	Other		
Influent						
1/7/2013	< 25	31	3,000	< 25	3,031	RW-1S & RW-2D
2/7/2013	< 25	48	4,800	< 25	4,848	RW-1S & RW-2D
3/6/2013	< 50	< 50	4,800	50	4,850	RW-2D Only
4/10/2013	< 50	< 50	5,000	< 50	5,000	RW-1S & RW-2D
4/30/2013	< 100	< 100	3,500	< 100	3,500	RW-2D Only
6/6/2013	< 50	< 50	4,000	< 50	4,000	RW-2D Only
8/20/2013	< 50	< 50	790	< 50	790	RW-1S Only
9/12/2013	40	25	900	14	979	RW-1S Only
10/10/2013	38	26	1,200	< 10	1,264	RW-1S Only
11/5/2013	24	21	1,200	< 10	1,245	RW-1S Only
12/11/2013	27	25	1,500	< 10	1,552	RW-1S & RW-2D
12/31/2013	32	19	1,500	17	1,568	RW-1S Only
2/18/2014	< 25	36	3,100	28	3,164	RW-1S & RW-2D
3/12/2014	< 25	26	2,200	< 25	2,226	RW-1S & RW-2D
4/8/2014	< 25	42	4,200	< 25	4,242	RW-2D Only
Mid-Carbon						
1/7/2013	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
2/7/2013	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
3/6/2013	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
4/10/2013	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
4/30/2013	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
6/6/2013	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
8/20/2013	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
9/12/2013	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
10/10/2013	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
11/5/2013	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
12/11/2013	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
12/31/2013	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
2/18/2014	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
3/12/2014	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
4/8/2014	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
Effluent						
1/7/2013	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
2/7/2013	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
3/6/2013	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
4/10/2013	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
4/30/2013	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
6/6/2013	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
8/20/2013	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
9/12/2013	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
10/10/2013	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
11/5/2013	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
12/11/2013	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
12/31/2013	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
2/18/2014	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
3/12/2014	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
4/8/2014	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	

Notes:

Concentrations in micrograms per liter (ug/l)

DCE = Dichloroethene = sum of all DCE isomers

TCE = Trichloroethene

PCE = Tetrachloroethene

Total VOC = Sum of all compounds detected

Plant-1 Operational Data
January, 2013 - April, 2014
Baldwin Place Shopping Center (now Somers Commons)
Somers, New York
NYSDEC Site No. 3-60-023

WELL RW-1S

Date	Days Elapsed	Water Meter	Total Gallons Treated	Run Time		Gallons/ Minute	Influent VOC/MtBE Concentration	VOCs/MtBE Recovered	
				Total Hours	Hours This Time period		(ug/l)	(g)	(lbs)
1/7/13	0	1,218,709		23,563.30	0.00		3,031		
2/7/13	31	1,227,890	9,181	23,662.50	99.20	1.54	4,848	168.5	0.371
3/6/13	27	1,227,890	0	23,662.50	0.00	0.00		0.0	0.000
4/10/13	35	1,234,080	6,190	23,746.50	84.00	1.23	5,000	117.1	0.258
4/30/13	20	1,234,080	0	23,746.50	0.00	0.00		0.0	0.000
6/6/13	37	1,234,080	0	23,746.50	0.00	0.00		0.0	0.000
7/11/13	35	1,234,080	0	23,746.50	0.00	0.00		0.0	0.000
8/20/13	40	1,238,859	4,779	23,782.50	36.00	2.21	790	14.3	0.032
9/12/13	23	1,246,216	7,357	23,839.40	56.90	2.15	979	27.3	0.060
10/10/13	28	1,254,796	8,580	23,904.50	65.10	2.20	1,264	41.0	0.091
11/15/13	36	1,265,281	10,485	23,982.80	78.30	2.23	1,245	49.4	0.109
12/11/13	26	1,272,975	7,694	24,039.80	57.00	2.25	1,552	45.2	0.100
12/31/13	20	1,279,911	6,936	24,091.00	51.20	2.26	1,568	41.2	0.091
2/18/14	49	1,296,058	16,147	24,207.80	116.80	2.30	3,164	193.4	0.426
3/12/14	22	1,297,921	1,863	24,221.60	13.80	2.25	2,226	15.7	0.035
4/8/14	27	1,297,921	0	24,221.60	0.00	0.00		0.0	0.000

Total Days Elapsed:	**456**	**days**
Total Treated:	**79,212**	**gallons**
Total Hours Operational:	**658.30**	**hours**
Average Flow Rate When Operating:	**2.01**	**gpm**
Total Mass Removed:	**1.57**	**pounds**

WELL RW-2D

Date	Days Elapsed	Water Meter	Total Gallons Treated	Run Time		Gallons/ Minute	Influent VOC/MtBE Concentration	VOCs/MtBE Recovered	
				Total Hours	Hours This Time period		(ppb)	(g)	(lbs)
1/7/13	0	4,555,987		11,598.70			3,031		
2/7/13	31	4,581,420	25,433	11,728.40	129.70	3.27	4,848	466.7	1.029
3/6/13	27	4,602,820	21,400	11,854.70	126.30	2.82	4,850	392.8	0.866
4/10/13	35	4,631,580	28,760	11,976.00	121.30	3.95	5,000	544.3	1.200
4/30/13	20	4,649,120	17,540	12,062.00	86.00	3.40	3,500	232.4	0.512
6/6/13	37	4,681,488	32,368	12,224.80	162.80	3.31	4,000	490.1	1.081
7/11/13	35	4,689,294	7,806	12,265.00	40.20	3.24	4,000	118.2	0.261
8/20/13	40	4,689,294	0	12,265.00	0.00	0.00		0.0	0.000
9/12/13	23	4,689,294	0	12,265.00	0.00	0.00		0.0	0.000
10/10/13	28	4,689,294	0	12,265.00	0.00	0.00		0.0	0.000
11/15/13	36	4,689,294	0	12,265.00	0.00	0.00		0.0	0.000
12/11/13	26	4,689,294	0	12,265.00	0.00	0.00		0.0	0.000
12/31/13	20	4,689,294	0	12,265.00	0.00	0.00		0.0	0.000
2/18/14	49	4,694,300	5,006	12,305.00	40.00	2.09	3,164	60.0	0.132
3/12/14	22	4,717,509	23,209	12,609.70	304.70	1.27	2,226	195.5	0.431
4/8/14	27	4,751,175	33,666	13,260.70	651.00	0.86	4,242	540.5	1.192

Total Days Elapsed:	**456**	**days**
Total Treated:	**195,188**	**gallons**
Total Hours Operational:	**1,662.00**	**hours**
Average Flow Rate When Operating:	**1.96**	**gpm**
Total Mass Removed:	**6.70**	**pounds**

Combined - Plant 1:

Total Days Elapsed:	**456**	**days**
Total Treated:	**274,400**	**gallons**
Total Hours Operational:	**2,320.30**	**hours**
Average Flow Rate When Operating:	**1.97**	**gpm**
Total Mass Removed:	**8.28**	**pounds**

Summary of Groundwater Analytical Results

On-Site Wells

Baldwin Place Shopping Center (now Somers Commons)

Somers, New York

NYSDEC Site No. 3-60-023

Date	Compound				Total VOC
	DCE	TCE	PCE	Other	
GW Stnd*	5.0	5.0	5.0		
MW-4S (Sampled Annually)					
Apr-04	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Apr-05	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Apr-06	---------- Not Sampled - April, 2006 ----------				
Apr-07	---------- Not Sampled - April, 2007 ----------				
Apr-08	---------- Not Sampled - April, 2008 ----------				
Apr-09	---------- Not Sampled - April, 2009 ----------				
Apr-10	---------- Not Sampled - April, 2010 ----------				
Apr-12	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Apr-13	---------- Not Sampled - April, 2013 ----------				
Apr-14	---------- Not Sampled - April, 2014 ----------				
MW-4D (Sampled Annually)					
Apr-04	< 1.0	< 1.0	< 1.0	4.5	4.5
Apr-05	< 1.0	< 1.0	< 1.0	2.4	2.4
Apr-06	---------- Not Sampled - April, 2006 ----------				
Apr-07	---------- Not Sampled - April, 2007 ----------				
Apr-08	---------- Not Sampled - April, 2008 ----------				
Apr-09	---------- Not Sampled - April, 2009 ----------				
Apr-10	---------- Not Sampled - April, 2010 ----------				
Apr-11	---------- Not Sampled - April, 2011 ----------				
Apr-12	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Apr-13	---------- Not Sampled - April, 2013 ----------				
Apr-14	---------- Not Sampled - April, 2014 ----------				
MW-8S (Sampled Annually)					
Apr-04	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Apr-05	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Apr-06	---------- Not Sampled - April, 2006 ----------				
Apr-07	---------- Not Sampled - April, 2007 ----------				
Apr-08	---------- Not Sampled - April, 2008 ----------				
Apr-09	---------- Not Sampled - April, 2009 ----------				
Apr-10	---------- Not Sampled - April, 2010 ----------				
Mar-11	---------- Not Sampled - April, 2011 ----------				
Apr-12	1.4	< 1.0	< 1.0	< 1.0	< 1.0
Apr-13	---------- Not Sampled - April, 2013 ----------				
Apr-14	---------- Not Sampled - April, 2014 ----------				
MW-9S (Sampled Annually)					
Apr-04	< 1.0	< 1.0	2.1	< 1.0	2.1
Apr-05	< 1.0	< 1.0	1.5	< 1.0	1.5
Apr-06	< 1.0	< 1.0	1.5	< 1.0	1.5
Apr-07	< 1.0	< 1.0	< 1.0	< 2.0	< 2.0
Apr-08	< 1.0	< 1.0	< 1.0	< 2.0	< 2.0
Apr-09	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0
Apr-10	---------- Not Sampled - April, 2010 ----------				
Mar-11	---------- Not Sampled - April, 2011 ----------				
Apr-12	1.4	< 1.0	3.8	< 1.0	5.2
Apr-13	---------- Not Sampled - April, 2013 ----------				
Apr-14	---------- Not Sampled - April, 2014 ----------				
MW-9D (Sampled Annually)					
Apr-04	< 1.0	< 1.0	1.2	< 1.0	1.2
Apr-05	< 1.0	< 1.0	1.7	< 1.0	1.7
Apr-06	< 1.0	< 1.0	0.7	< 1.0	0.7

Summary of Groundwater Analytical Results

On-Site Wells

Baldwin Place Shopping Center (now Somers Commons)

Somers, New York

NYSDEC Site No. 3-60-023

Date	Compound				Total VOC
	DCE	TCE	PCE	Other	
GW Stnd*	**5.0**	**5.0**	**5.0**		
MW-9D (continued)					
Apr-07	< 1.0	< 1.0	< 1.0	< 2.0	< 2.0
Apr-08	< 1.0	< 1.0	< 1.0	< 2.0	< 2.0
Apr-09	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0
Apr-10	---------- Not Sampled - April, 2010 ----------				
Mar-11	---------- Not Sampled - April, 2011 ----------				
Apr-12	1.4	< 1.0	< 1.0	< 1.0	1.4
Apr-13	---------- Not Sampled - April, 2013 ----------				
Apr-14	---------- Not Sampled - April, 2014 ----------				
MW-5S (Sampled Quarterly)					
Jan-04	4.1	6.6	82	2.5	95
Apr-04	< 1.0	< 1.0	4.6	< 1.0	4.6
Jul-04	< 10	5.4	40	< 10	45
Oct-04	5.7	6.3	35	< 100	47
Jan-05	7.1	< 10	70	< 10	77
Apr-05	0.9	3.2	40	< 1.0	44
Aug-05	5.7	4.5	23	< 1.0	33
Nov-05	7.6	7.3	42	1.1	58
Jan-06	< 1.0	1.5	20	< 1.0	22
Apr-06	1.7	4.1	28	< 1.0	34
Jul-06	4.6	7.4	17	< 1.0	29
Oct-06	< 1.0	6.8	22	0.75	30
Jan-07	1.6	4.4	23	< 2.0	29
Apr-07	< 1.0	< 1.0	4.3	< 2.0	4.3
Jul-07	15	5.0	10	< 2.0	30
Oct-07	3.2	5.0	13	< 2.0	21
Jan-08	< 1.0	< 1.0	9.3	< 2.0	9.3
Apr-08	< 1.0	< 1.0	10	< 2.0	10
Jul-08	8.6	4.5	10	< 2.0	23
Oct-08	5.9	5.3	16	< 1.0	27
Jan-09	< 1.0	1.1	16	< 1.0	17
Apr-09	< 1.0	3.5	7.7	< 1.0	11
	---------- Not Sampled - April, 2009 through March, 2011 ----------				
Mar-11	< 1.0	< 1.0	7.9	< 1.0	7.9
	---------- Not Sampled - March, 2011 through April, 2012 ----------				
Apr-12	1.8	3.2	25	< 1.0	30
	---------- Not Sampled - April, 2012 through April, 2014 ----------				
MW-7D (Sampled Quarterly)					
Jan-04	< 1.0	0.6	5.6	< 1.0	6.2
Apr-04	< 1.0	< 1.0	5.1	< 1.0	5.1
Jul-04	< 1.0	< 1.0	3.4	< 1.0	3.4
Oct-04	< 1.0	0.51	4.9	< 10	5.4
Jan-05	< 1.0	0.66	7.0	< 1.0	7.7
Apr-05	< 1.0	0.56	5.4	< 1.0	6.0
Aug-05	< 1.0	0.58	5.7	< 1.0	6.3
Nov-05	< 1.0	< 1.0	3.2	< 1.0	3.2
Jan-06	< 1.0	< 1.0	4.3	< 1.0	4.3
Apr-06	< 1.0	< 1.0	4.3	< 1.0	4.3
Jul-06	< 1.0	< 1.0	2.6	< 1.0	2.6
Oct-06	< 1.0	0.7	3.1	0.71	4.5

Summary of Groundwater Analytical Results

On-Site Wells

Baldwin Place Shopping Center (now Somers Commons)

Somers, New York

NYSDEC Site No. 3-60-023

Date	Compound				Total VOC
	DCE	TCE	PCE	Other	
GW Stnd*	**5.0**	**5.0**	**5.0**		
MW-7D (Continued)					
Jan-07	< 1.0	< 1.0	2.7	< 2.0	2.7
Apr-07	< 1.0	< 1.0	2.6	< 2.0	2.6
Jul-07	< 1.0	< 1.0	3.7	< 2.0	3.7
Oct-07	< 1.0	< 1.0	1.7	< 2.0	1.7
Jan-08	---------- Not Sampled ----------				
Apr-08	< 1.0	< 1.0	1.7	5.2	6.9
Apr-09	< 1.0	< 1.0	3.0	< 1.0	3.0
	---------- Not Sampled - April, 2009 through April, 2012 ----------				
Apr-12	< 1.0	< 1.0	< 1.0	< 1.0	0
	---------- Not Sampled - April, 2012 through April, 2014 ----------				
MW-12S (Sampled Quarterly)					
Jan-04	< 1.0	< 1.0	34	< 1.0	34
Apr-04	< 1.0	< 1.0	13	< 1.0	13
Jul-04	---------- Not Sampled ----------				
Oct-04	< 5.0	< 5.0	7.0	< 10	7.0
Jan-05	2.4	8.4	4,500	< 1.0	4,511
Apr-05	< 20	< 20	980	< 20	980
Aug-05	1.5	5.0	6,200	< 1.0	6,207
Nov-05	< 1.0	< 1.0	120	< 1.0	120
Jan-06	< 10.0	< 1.0	45	< 1.0	45
Apr-06	< 100	< 100	330	< 100	330
Jul-06	< 1.0	< 1.0	100	< 1.0	100
Oct-06	< 500	< 500	6,700	< 500	6,700
Jan-07	< 100	< 100	9,100	< 200	9,100
Apr-07	< 200	< 200	3,600	< 400	3,600
Jul-07	< 200	< 200	3,900	< 400	3,900
Oct-07	< 50	< 50	1,600	< 100	1,600
Jan-08	< 50	< 50	6,600	< 100	6,600
Apr-08	< 200	< 200	6,200	< 400	6,200
Jul-08	< 50	< 50	4,400	NA	4,400
Oct-08	< 100	< 100	5,900	< 100	5,900
Jan-09	< 100	< 100	3,500	< 100	3,500
Apr-09	< 100	< 100	5,800	< 100	5,800
	---------- Not Sampled -April, 2009 through March, 2011 ----------				
Mar-11	< 100	< 100	6,200	< 100	6,200
	---------- Not Sampled - March, 2011 through April, 2012 ----------				
Apr-12	< 100	< 100	2,800	< 100	2,800
	---------- Not Sampled - April, 2012 through April, 2014 ----------				

Notes:

Concentrations in micrograms per liter (ug.l)

GW Standard = TOGS 1.1.1

DCE = Diclhoroethene - Total of individual isomers

Summary of Groundwater Analytical Results
Recovery Wells RW-1S and RW-2D
Baldwin Place Shopping Center (now Somers Commons)
Somers, New York
NYSDEC Site No. 3-60-023

Date	Compound				Total VOC
	DCE	TCE	PCE	Other	
GW Stnd*	**5.0**	**5.0**	**5.0**		
RW-1S					
Jan-04	120	43	1,500	1.2	1,664
Apr-04	110	47	1,700	< 20	1,857
Jul-04	< 200	< 200	4,400	< 200	4,400
Oct-04	< 1,000	< 1,000	5,200	< 2,000	5,200
Jan-05	< 200	< 100	2,900	< 200	2,900
Apr-05	44	34	1,700	< 50	1,778
Aug-05	35	42	2,600	< 1.0	2,677
Nov-05	57	34	640	1.7	733
Jan-06	< 200	< 200	1,700	< 200	1,700
Apr-06	38	28	970	< 2,500	1,036
Jul-06	38	29	1,000	99	1,166
Oct-06	< 100	< 100	1,200	< 100	1,200
Jan-07	45	23	1,300	< 20	1,368
Apr-07	48	< 25	1,400	< 50	1,448
Jul-07	64	31	1,400	< 20	1,495
Oct-07	54	39	600	< 40	693
Jan-08	33	24	1,400	< 40	1,457
Apr-08	56	25	2,000	< 40	2,081
Jul-08	45	< 20	1,100	NA	1,145
Oct-08	30	< 25	1,100	< 50	1,130
Jan-09	< 25	< 25	1,800	< 25	1,800
Apr-09	32	< 25	830	< 25	862
May-09	---------- Not Sampled - Well Not Operating ----------				
Jul-09	---------- Sampled as Combined Influent ----------				
Oct-09	---------- Sampled as Combined Influent ----------				
Jan-10	---------- Sampled as Combined Influent ----------				
Apr-10	---------- Plant-1 Not Operating ----------				
Jul-10	---------- Plant-1 Not Operating ----------				
Oct-10	---------- Sampled as Combined Influent ----------				
Jan-11	---------- Sampled as Combined Influent ----------				
Mar-11	22	10	470	< 1.0	502
Jul-11	---------- Sampled as Combined Influent ----------				
Oct-11	---------- Not Sampled Pending NYSDEC Laboratory Contract ----------				
Jan-12	---------- Sampled as Combined Influent ----------				
Apr-12	51	19	640	< 10	710
Jul-12	---------- Sampled as Combined Influent ----------				
Oct-12	---------- Sampled as Combined Influent ----------				
Jan-13	---------- Sampled as Combined Influent ----------				
Apr-13	---------- Not Sampled - Well Not Operating ----------				
Jun-13	---------- Not Sampled - Well Not Operating ----------				
Oct-13	38	26	1,200	< 10	1,264
Jan-14	32	19	1,500	17	1,568
Apr-14	---------- Not Sampled - Well Not Operating ----------				

Summary of Groundwater Analytical Results
Recovery Wells RW-1S and RW-2D
Baldwin Place Shopping Center (now Somers Commons)
Somers, New York
NYSDEC Site No. 3-60-023

Date	Compound				Total VOC
	DCE	TCE	PCE	Other	
GW Stnd*	**5.0**	**5.0**	**5.0**		
RW-2D					
Jan-04	3.5	100	5,900	2.2	6,006
Apr-04	< 100	92	6,200	< 100	6,292
Jul-04	< 200	< 200	5,300	< 200	5,300
Oct-04	< 2,000	< 1,000	5,600	< 2,000	5,600
Jan-05	< 200	< 200	5,000	< 200	5,000
Apr-05	< 200	< 200	4,500	< 200	4,500
Aug-05	12	55	780	< 1.0	847
Nov-05	3.7	96	2,400	3.3	2,503
Jan-06	< 200	< 200	5,500	< 200	5,500
Apr-06	< 400	< 400	4,100	< 400	4,100
Jul-06	4.5	57	3,900	2.5	3,964
Oct-06	< 500	< 500	4,900	< 500	4,900
Jan-07	< 100	< 100	7,200	< 200	7,200
Apr-07	< 100	< 100	5,300	< 200	5,300
Jul-07	< 100	< 100	2,400	< 200	2,400
Oct-07	< 50	68	2,000	< 100	2,068
Jan-08	< 50	53	5,900	< 100	5,953
Apr-08	< 200	< 200	4,800	< 400	4,800
Jul-08	< 200	< 200	5,200	NA	5,200
Oct-08	< 100	< 100	6,400	< 200	6,400
Jan-09	< 100	< 100	5,300	< 100	5,300
Apr-09	< 100	< 100	6,500	< 100	6,500
May-09	< 200	< 200	7,700	< 200	7,700
Jul-09	---------- Sampled as Combined Influent ----------				
Oct-09	---------- Sampled as Combined Influent ----------				
Jan-10	---------- Sampled as Combined Influent ----------				
Apr-10	---------- Plant-1 Not Operating ----------				
Jul-10	---------- Plant-1 Not Operating ----------				
Oct-10	---------- Sampled as Combined Influent ----------				
Jan-11	---------- Sampled as Combined Influent ----------				
Mar-11	< 50	< 50	4,900	< 50	4,900
Jul-11	---------- Sampled as Combined Influent ----------				
Oct-11	---------- Not Sampled Pending NYSDEC Laboratory Contract ----------				
Jan-12	---------- Sampled as Combined Influent ----------				
Apr-12	< 100	< 100	7,600	< 100	7,600
Jul-12	---------- Sampled as Combined Influent ----------				
Oct-12	---------- Sampled as Combined Influent ----------				
Jan-13	---------- Sampled as Combined Influent ----------				
Apr-13	< 100	< 100	3,500	< 100	3,500
Jun-13	< 50	< 50	4,000	< 50	4,000
Oct-13	---------- Not Sampled - Well Not Operating ----------				
Jan-14	---------- Not Sampled - Well Not Operating ----------				
Apr-14	< 25	42	4,200	< 25	4,242

Notes:

Concentrations in micrograms per liter (ug.l)

GW Standard = TOGS 1.1.1

DCE = Diclhoroethene - Total of individual isomers

Summary of Groundwater Analytical Results
Meadow Park Road Monitoring Wells
(Former Residential Water Supply Wells)
Baldwin Place Shopping Center (now Somers Commons)
Somers, New York
NYSDEC Site No. 3-60-023

Date	Compound				Total VOC
	DCE	TCE	PCE	Other	
GW Stnd*	**5.0**	**5.0**	**5.0**		
# 6 Meadow Park Road (Sorensen)					
June, 2000	< 1.0	< 1.0	3.8	< 1.0	3.8
June, 2001	< 1.0	< 1.0	6.3	< 1.0	6.3
June, 2002	< 1.0	1.0	1.5	< 1.0	2.5
June, 2003	< 1.0	< 1.0	3.1	< 1.0	3.1
June, 2004	---------- Not Sampled ----------				
June, 2005	< 1.0	2.3	1.4	< 1.0	3.7
July, 2006	< 1.0	0.9	2.9	< 1.0	3.8
July, 2007	< 1.0	< 1.0	2.4	< 1.0	2.4
July, 2008	< 1.0	< 1.0	1.0	< 1.0	1.0
	---------- Not Sampled - June, 2008 -- Present ----------				
# 12 Meadow Park Road (Matthews)					
June, 2000	< 1.0	< 1.0	5.5	< 1.0	5.5
June, 2001	< 1.0	< 1.0	2.8	< 1.0	2.8
June, 2002	< 1.0	< 1.0	0.8	< 1.0	0.8
June, 2003	< 1.0	< 1.0	< 1.0	< 1.0	0.0
June, 2004	---------- Not Sampled ----------				
June, 2005	< 1.0	< 1.0	< 1.0	< 1.0	0.0
July, 2006	< 1.0	< 1.0	1.4	< 1.0	1.4
July, 2007	< 1.0	< 1.0	< 1.0	< 1.0	0.0
	---------- Not Sampled - July, 2007 -- Present ----------				
# 13 Meadow Park Road (Pepi)					
June, 2000	< 1.0	< 1.0	11	< 1.0	11
June, 2001	< 1.0	< 1.0	7.0	< 1.0	7.0
June, 2002	< 1.0	< 1.0	28	< 1.0	28
June, 2003	< 1.0	< 1.0	20	< 1.0	20
June, 2004	---------- Not Sampled ----------				
June, 2005	< 1.0	< 1.0	6.8	1.0	7.8
July, 2006	< 1.0	< 1.0	14	< 1.0	14
July, 2007	< 1.0	< 1.0	11	< 1.0	11
July, 2008	< 1.0	< 1.0	6.1	< 1.0	6.1
	---------- Not Sampled - June, 2008 -- Present ----------				
# 21 Meadow Park Road (Hale)					
June, 2000	< 1.0	0.7	11	1.4	13
June, 2001	< 1.0	< 1.0	5.1	1.0	6.1
June, 2002	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
June, 2003	< 1.0	0.9	< 1.0	< 1.0	0.9
June, 2004	---------- Not Sampled ----------				
June, 2005	< 1.0	< 1.0	< 1.0	0.8	0.8
July, 2006	< 1.0	0.5	< 1.0	< 1.0	0.5
July, 2007	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
July, 2008	< 1.0	< 1.0	< 1.0	1.7	1.7
	---------- Not Sampled - June, 2008 -- Present ----------				

Notes:

Concentrations in micrograms per liter (ug.l)

GW Standard = TOGS 1.1.1

DCE = Diclhoroethene - Total of individual isomers

Summary of Soil Vapor Intrusion Monitoring
Baldwin Place Shopping Center (now Somers Common)
Somers, New York
NYSDEC Site No. 3-60-023

Sample ID/Date	Carbon Tetrachloride (µg/m³)	Tetrachloroethene (µg/m³)	1,1,1-Trichloroethane (µg/m³)	Trichloroethene (µg/m³)
April 1, 2008				
360023-SS-03	0.31	259	ND	3.06
360023-IA-03	0.50	2.71	ND	0.32
360023-SS-04	NS	NS	NS	NS
360023-IA-04	NS	NS	NS	NS
360023-OA-01	0.50	3.66	ND	ND
January 19, 2009				
360023-SS-03	ND	313	ND	3.76
360023-IA-03	0.50	0.95	ND	ND
360023-SS-04	NS	NS	NS	NS
360023-IA-04	NS	NS	NS	NS
360023-OA-01	0.63	0.27	ND	ND
January, 2010 through January, 2012 - SVI Data Not Available				
January 17, 2013				
360023-SS-03	ND	340	ND	5.00
360023-IA-03	0.50	1.00	ND	0.23
360023-SS-04	ND	250	ND	1.30
360023-IA-04	0.46	24	ND	ND
360023-IA-04 (DUP)	0.39	21	ND	ND
360023-OA-01	0.41	ND	ND	ND
January 19, 2014				
360023-SS-03	ND	230	ND	4.90
360023-IA-03	ND	ND	0.43	ND
360023-SS-04	ND	190	ND	1.50
360023-IA-04	0.14	ND	ND	ND
360023-OA-01	0.44	ND	ND	ND
360023-Dup	ND	230	ND	4.70
Matrix	Matrix 1	Matrix 2	Matrix 2	Matrix 1
Action	No Further Action	Monitor	No Further Action	No Further Action

Notes:
Concentrations in micrograms per cubic meter (ug/m^3)
Matrix = Decision matrix per NYSDOH Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York (October, 2006