New York State Department of Environmental Conservation
Division of Environmental Remediation
Bureau of Technical Support

ADDITIONS/CHANGES TO REGISTRY: SUMMARY OF APPROVALS

SITE NAME: Minmilt Realty DEC I.D. NUMBER 152147

Current Classification 2 Volunteer Yes ____ No ____ Sign (7) below

Activity: ☐ Add as Class ____ ☑ Reclassify to 4 ☐ Delist Category ____ ☐ Modify ____

Approvals:

1. Regional Hazardous Waste Engineer W. Parish — Yes ☑ No ☐ 2-25-05
2. BEEI of NYSDOH S. Bates HA updated 10/4/07 — Yes ☑ No ☐ 3-22-05
3. DEE - D. Dana — Yes ☑ No ☐ 3-18-05
4. Bureau A C. Vasudevan Remedial Action Bureau Director — Yes ☑ No ☐ 9-13-07
5. Site Control Section K. Lewandowski — Kelly A Lewandowski Date 10/30/07
6. Director A. English — Andrew J. English Date 11/1/07
7. Assistant Division Director *(Required only for Class 2 sites)* ____ Date ____

SH

Completion Checklist for Registry Sites

		Completed By: Initials	Date
OWNER NOTIFICATION LETTER?	☑	SH	11-9-07
ADJACENT PROPERTY OWNER NOTIFICATION LETTER?	☑	SH	11-29-07
ENB / LEGAL NOTICE SENT? (For Deletion Only)	☐		
COMMENTS SUMMARIZED / PLACE IN REPOSITORY?	☐		
FINAL NOTIFICATION SENT TO OWNER? (For Deletion Only)	☐		

Consent Order issued 12/4/03

9/10/2007

New York State Department of Environmental Conservation
Division of Environmental Remediation

MEMORANDUM

TO: Kelly Lewandowski, Chief, Site Control Section, Bureau of Technical Support

FROM: John Swartwout, Section Chief/RHWRE
Steven Scharf, Project Manager

THRU: Chittibabu Vasudevan, Director, Remedial Bureau A

SUBJECT: **Proposed Site Classification Change**

Site Name Minmilt Realty (Hygrade Metal Mould **Site Code** 152147
City East Farmingdale **County** Suffolk
Current Classification 02 **Proposed Classification** 04

DATE: **9/10/2007**

We propose that the classification of this site be changed as indicated above. Please initiate the review and concurrence process for this proposed change. Attached is a Site Classification Form that provides information regarding the site and the basis for the proposed change. Also attached is the support document (in PDF format) that provides a site map, the classification worksheet, and other supporting information.

Attachments

ec w/att: Chittibabu Vasudevan, Director, Remedial Bureau A
John Swartwout, Section Chief/RHWRE
Steven Scharf, Project Manager

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF ENVIRONMENTAL REMEDIATION
Site Classification Form

9/10/2007

Site Code	152147	**Site Name**	Minmilt Realty (Hygrade Metal Moulding)
City	East Farmingdale	**Town**	Babylon
Region	1	**County**	Suffolk
Current Classification	02	**Proposed Classification**	04
Estimated Size (acres)	2.2800	**Site Type**	Structure
Significant Threat:	- **Yes**	- **No**	- **NA**
Priority ranking Score	260	**Project Manager**	Steven Scharf

Site Description

This site is a metal forming facility consisting of a one-story industrial building on a 2.28 acre parcel. Industrial activities at this site included the use of vapor degreasers containing tetrachloroethylene or perchlorethene(PCE). The spent degreasers were disposed into a leaching pool on-site without a SPDES permit. A Consent Order (CO) was signed on November 7, 1994 between the NYSDEC and the current owner to conduct a RI/FS and an Interim Remedial Action (IRM). The RI found that soils on the east side of the building were highly contaminated with PCE at levels up to 820 ppm, and groundwater contained PCE at levels up to 140,000 ppb. An IRM consisting of soil vapor extraction (SVE) and groundwater pump and treat were installed in February 1997 and have run continuously, aside from routine maintenance, since that time. The Suffolk County Department of Health Services,in July 1997, installed a monitoring well and took hydro punch samples on Central Avenue, about 1500 feet downgradient of the site. A PRP investigation of the off-site groundwater plume commenced in December 1998. Vapor phase activated carbon treatment was removed from the SVE off gas in April 1999 as it was no longer required based on air guide 1. The groundwater component is containing the plume and continues to remove PCE from the Upper Glacial and Magothy aquifers. The off-site RI/FS was approved and a ROD calling for the continued operation of the SVE system to address the soil contamination and the extraction and treatment of the groundwater to address the groundwater contamination was signed on March 3, 2002. Operation, maintenance and monitoring continues and an OM&M order was signed. The shallow monitoring wells on site and downgradient of the source area have cleaned by orders of magnitude and are now, or are approaching MCL conditions. The PRPs have agreed to investigate the potential for soil vapor intrusion into buildings in the area to the satisfaction of NYSDEC/NYSDOH. A minor change has been finalized and approved such that deed restrictions are no longer required. All the program elements are in place to allow the site to be reclassified to class 4, a designation indicating that the remedy has been implemented at the site and that continued operation, maintenance and monitoring (OM,M) are required. Once the remedial system is finished, and testing is done per DEC and DOH requirements, the Minmilt realty site can be delisted.

Materials Disposed at Site	**Quantity Disposed**
OU 01	
TETRACHLOROETHYLENE {(PCE OR "PERC.") (F001)}	UNKNOWN

Analytical Data Available for : Groundwater, Soil

Applicable Standards Exceeded for: Groundwater

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF ENVIRONMENTAL REMEDIATION
Site Classification Form

9/10/2007

Site Code 152147 **Site Name** Minmilt Realty (Hygrade Metal Moulding)

Assessment of Environmental Problems

Soil at the site and groundwater at and downgradient of the site have been contaminated. The PRP implemented an SVE and near offsite groundwater pump and treat IRM. The O&M data shows that the SVE is nearly complete in removing PCE from soils. To date, more than 5,200 pounds of PCE has been removed from the soils and 20,000 pounds from the groundwater. Vertical profiling verified that the clay layers inhibiting the vertical migration of the Minmilt Plume to the deeper aquifer in the vicinity of the source were continuous.

Assessment of Health Problems

Operations at the site contaminated subsurface soils and groundwater with tetrachloroethene and other solvents. Exposures to contaminated groundwater are not expected because the area is supplied with public water. The nearest active public water supply well is about 4,500 feet downgradient of the site and is not impacted by site-related contamination. On-going remediation has significantly reduced levels of subsurface contamination at the site. Human exposure to contaminated subsurface soils is not expected to occur unless contaminated soils are excavated. Testing of indoor air at a building adjacent to the Minmilt building did not detect site related contamination. NYSDOH and NYSDEC will evaluate the need to conduct additional investigations to determine the potential for soil vapor intrusion into structures on or near the site.

Remedy Description and Cost

Remedy Description for Operable Unit 00

Total Cost

Remedy Description for Operable Unit 01

The SVE and the groundwater pump and treat system have been fully operational since 1997. A quarterly monitoring program has in place since that time as well. The order on consent for remedial action consists of continued Soil vapor extraction (SVE) and groundwater pump and treat operation, maintenance and monitoring. A minor change was approved that no longer requires deed restrictions. Once the remedial system has been deemed complete, a delist petiton will be routed for review and approval.

Total Cost

Remedy Description for Operable Unit 01A

The Minmilt IRM consisted of a soil vapor extraction and a groundwater extraction and treatment system. The extraction and treatment system contains the groundwater plume eminating from the site and the SVE system removed the source area. this IRM became the selected remedy in the ROD. A small amount of fuel oil was detectedon the water table from an unknown source and was

Site Code 152147 **Site Name** Minmilt Realty (Hygrade Metal Moulding)

periodically pumped out until it was entirely removed through MW3. The fluctuating groundwater elevation aided in this removal. the MW3 screen always remained above the water table.

Total Cost

Remedy Description for Operable Unit 01B

The Minmilt Realty Groundwater extraction and treatment and SVE system have been on-line since February 2007.

Total Cost

OU 00 **Site Management Plan Approval: 02/01/1997** **Status: ACT**

Basis for Classification Change

All the requirements of the Minmilt Realty (Hydgrade Metals) are in place. DER finalized and approved a Minor Change that addresses the deed restriction requirements such that none are now required. Now that the site is in operation, maintenance and monitoring, a site reclassification from Class 2 to Class 4 is in order. Pursuant to 6 NYCRR Part 375 Section 2.7-C and 2.7-D and Dale Desnoyers, a Certificate of Completion for this reclassification is not required.

Organization Approval Dates:

SCS Distribution: 02/14/2005 **DOH: 03/22/2005** **DEE: 03/18/2005**

RHWRE: **SCS Chief: 03/24/2005**

CO Remedial Bureau: 02/11/2005 **BTS BUR Dir.:**

Signature (Concurrence with Proposed Classification)	Organization Title	Date
E. Valentyn	Bureau Director	9/13/07

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF ENVIRONMENTAL REMEDIATION
Site Classification Form

10/10/2007

Site Code	152147	**Site Name**	Minmilt Realty (Hygrade Metal Moulding)
City	East Farmingdale	**Town**	Babylon
Region	1	**County**	Suffolk
Current Classification	02	**Proposed Classification**	04
Estimated Size (acres)	2.2800	**Site Type**	Structure
Significant Threat:	**Yes** - **No** - **NA**		
Priority ranking Score	260	**Project Manager**	Steven Scharf

Site Description

This site is a metal forming facility consisting of a one-story industrial building on a 2.28 acre parcel. Industrial activities at this site included the use of vapor degreasers containing tetrachloroethylene or perchlorethene (PCE). The spent degreasers were disposed into a leaching pool on-site without a SPDES permit. A Consent Order (CO) was signed on November 7, 1994 between the NYSDEC and the current owner to conduct a RI/FS and an Interim Remedial Action (IRM). The RI found that soils on the east side of the building were highly contaminated with PCE at levels up to 820 ppm, and groundwater contained PCE at levels up to 140,000 ppb. An IRM consisting of soil vapor extraction (SVE) and groundwater pump and treat were installed in February 1997 and have run continuously, aside from routine maintenance, since that time. The Suffolk County Department of Health Services, in July 1997, installed a monitoring well and took hydro punch samples on Central Avenue, about 1500 feet down gradient of the site. A PRP investigation of the off-site groundwater plume commenced in December 1998. Vapor phase activated carbon treatment was removed from the SVE off gas in April 1999 as it was no longer required based on air guide 1. The groundwater component is containing the plume and continues to remove PCE from the Upper Glacial and Magothy aquifers. The off-site RI/FS was approved and a ROD calling for the continued operation of the SVE system to address the soil contamination and the extraction and treatment of the groundwater to address the groundwater contamination was signed on March 3, 2002. Operation, maintenance and monitoring continue and an OM&M order was signed. The shallow monitoring wells on site and down gradient of the source area have cleaned by orders of magnitude and are now, or are approaching MCL conditions. The PRPs have agreed to investigate the potential for soil vapor intrusion into buildings in the area to the satisfaction of NYSDEC/NYSDOH. A minor change has been finalized and approved such that deed restrictions are no longer required. All the program elements are in place to allow the site to be reclassified to class 4, a designation indicating that the remedy has been implemented at the site and that continued operation, maintenance and monitoring (OM &M) are required. Once the remedial system is finished, and testing is done per DEC and DOH requirements, the Minmilt Realty site can be delisted.

Materials Disposed at Site	**Quantity Disposed**
OU 01	
TETRACHLOROETHYLENE {(PCE OR "PERC.") (F001)}	UNKNOWN

Analytical Data Available for : Groundwater, Soil

Applicable Standards Exceeded for: Groundwater

Site Code 152147 **Site Name** Minmilt Realty (Hygrade Metal Moulding)

Assessment of Environmental Problems

Soil at the site and groundwater at and down gradient of the site, have been contaminated. The PRP implemented an SVE and near offsite groundwater pump and treat IRM. The O&M data shows that the SVE is nearly complete in removing PCE from soils. To date, more than 5,200 pounds of PCE has been removed from the soils and 20,000 pounds from the groundwater. Vertical profiling verified that the clay layers inhibiting the vertical migration of the Minmilt Plume to the deeper aquifer in the vicinity of the source were continuous.

Assessment of Health Problems

Operations at the site contaminated subsurface soils and groundwater with tetrachloroethene and other solvents. Exposures to contaminated groundwater are not expected because the area is supplied with public water. The nearest active public water supply well is about 4,500 feet down gradient of the site and is not impacted by site-related contamination. On-going remediation has significantly reduced levels of subsurface contamination at the site. Human exposure to contaminated subsurface soils is not expected to occur unless contaminated soils are excavated. Indoor air sampling conducted in early 2006 at the Minmilt building and the adjacent building to the east did not detect tetrachloroethene at concentrations greater than 5 micrograms/cubic meter of air. A soil vapor intrusion investigation of the Minmilt building and buildings that may be affected by soil vapor intrusion from site contaminants will be required before the State approves discontinuation of the soil vapor extraction system operation.

Remedy Description and Cost

Remedy Description for Operable Unit 01

The SVE and the groundwater pump and treat system have been fully operational since 1997. A quarterly monitoring program has been in place since that time as well. The Order on Consent for remedial action consists of continued soil vapor extraction (SVE) and groundwater pump and treat operation, maintenance and monitoring. A minor change was approved that no longer requires deed restrictions. Once the remedial system has been deemed complete, a delisting petition will be routed for review and approval.

Total Cost

Remedy Description for Operable Unit 01A

The Minmilt IRM consisted of a soil vapor extraction and a groundwater extraction and treatment system. The extraction and treatment system contains the groundwater plume eminating from the site and the SVE system removed the source area. This IRM became the selected remedy in the ROD. A small amount of fuel oil was detected on the water table from an unknown source and was periodically pumped out until it was entirely removed through MW3. The fluctuating groundwater elevation aided in this removal. The MW3 screen always remained above the water table.

Total Cost

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF ENVIRONMENTAL REMEDIATION
Site Classification Form

10/10/2007

Site Code 152147 **Site Name** Minmilt Realty (Hygrade Metal Moulding)

Remedy Description for Operable Unit 01B

The Minmilt Realty Groundwater Extraction and Treatment and SVE systems have been on-line since February 2007.

Total Cost

OU 00 **Site Management Plan Approval: 02/01/1997** **Status: ACT**

Basis for Classification Change

All the requirements of the Minmilt Realty (Hygrade Metals) are in place. DER finalized and approved a minor change that addresses the deed restriction requirements such that none are now required. Now that the site is in operation, maintenance and monitoring, a site reclassification from Class 2 to Class 4 is in order. Pursuant to 6 NYCRR Part 375 Section 2.7-C and 2.7-D and Dale Desnoyers, a Certificate of Completion for this reclassification is not required.

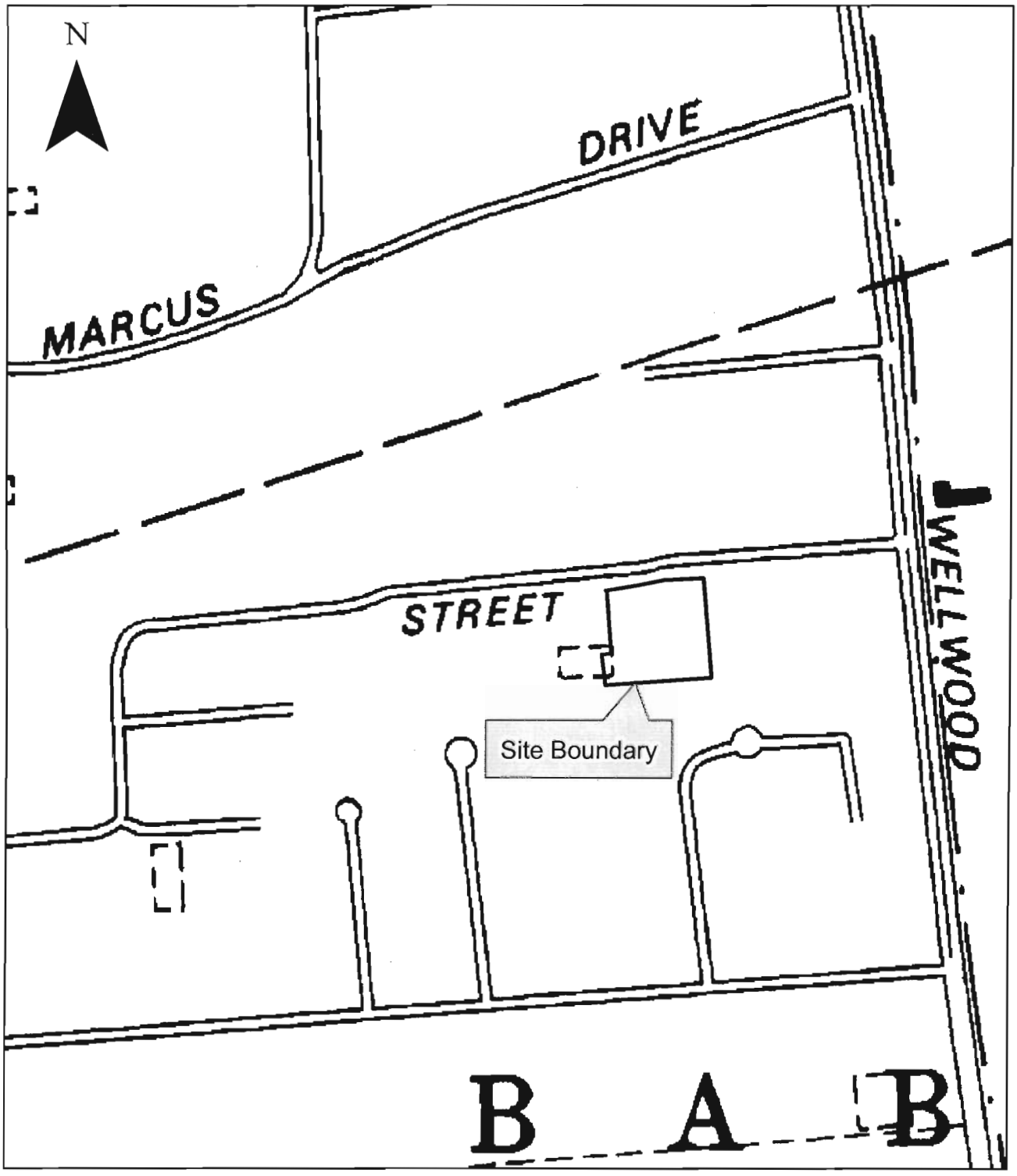
Organization Approval Dates:

SCS Distribution: 02/14/2005 **DOH: 03/22/2005** **DEE: 03/18/2005**

RHWRE: 02/25/05 **SCS Chief:**

CO Remedial Bureau: 02/11/2005 & 09/13/07 **BTS BUR Dir.:**

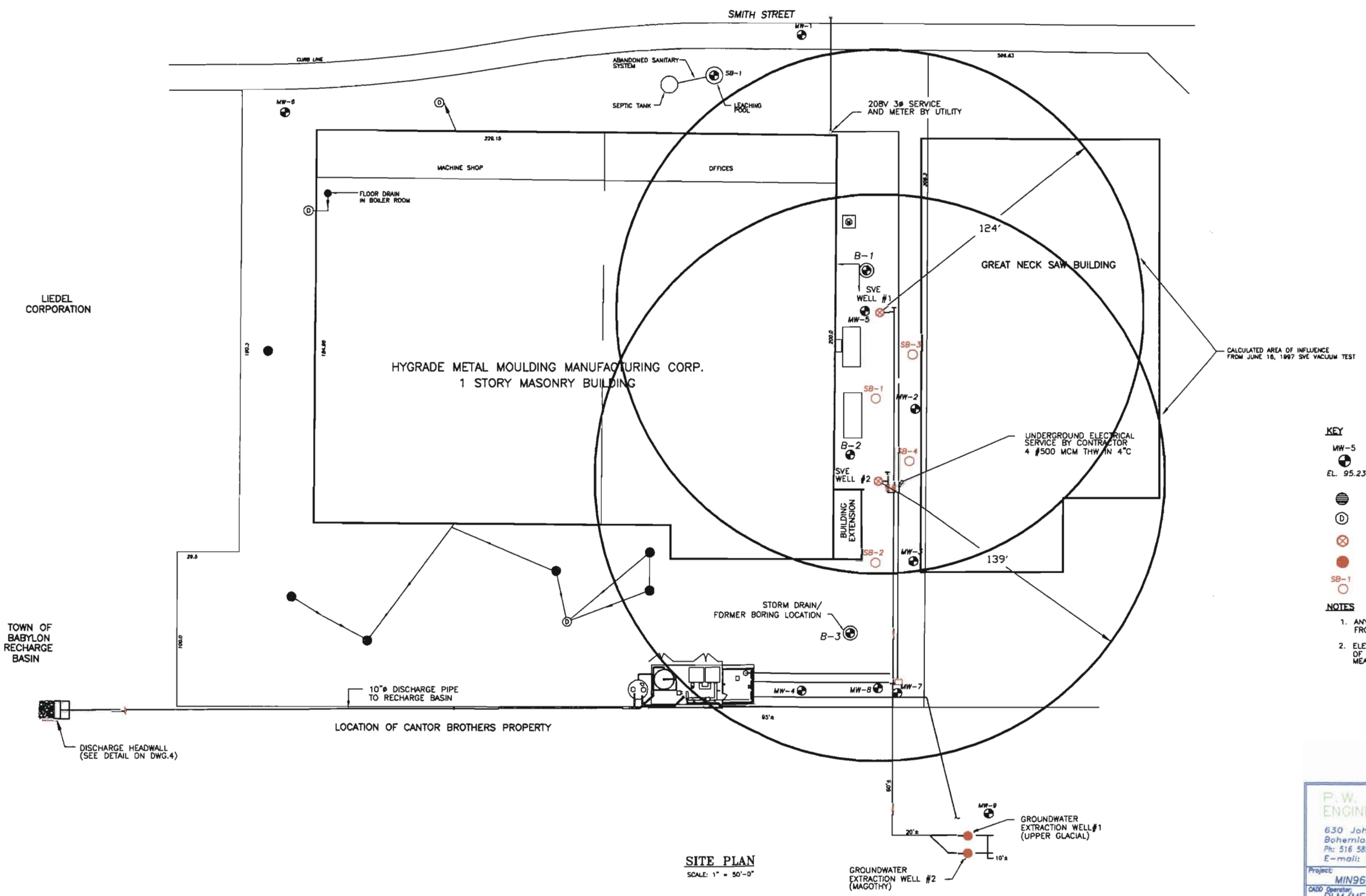
Andrew J Guglielmi	BTS	11/1/07
Signature (Concurrence with Proposed Classification)	Organization Title	Date



Minmilt Realty Corp

152147


540 smith street, babylon, ny
N
W
E
S
© 2007 Europa Technologies
Image © 2007 New York GIS
©2005 Google
Pointer 40°45'28.40" N 73°24'17.81" W elev 100 ft
Streaming 65%
Eye alt 1646 ft



SITE PLAN
SCALE: 1" = 50'-0"

KEY

MW-5
EL. 95.23 — EXISTING MONITORING WELL OR BORING WITH ELEVATION

EXISTING DRYWELL (OPEN GRATE)

D — EXISTING DRYWELL (COVERED)

SVE SYSTEM

GROUNDWATER EXTRACTION WELL

SB-1 — SOIL BORING LOCATION

NOTES

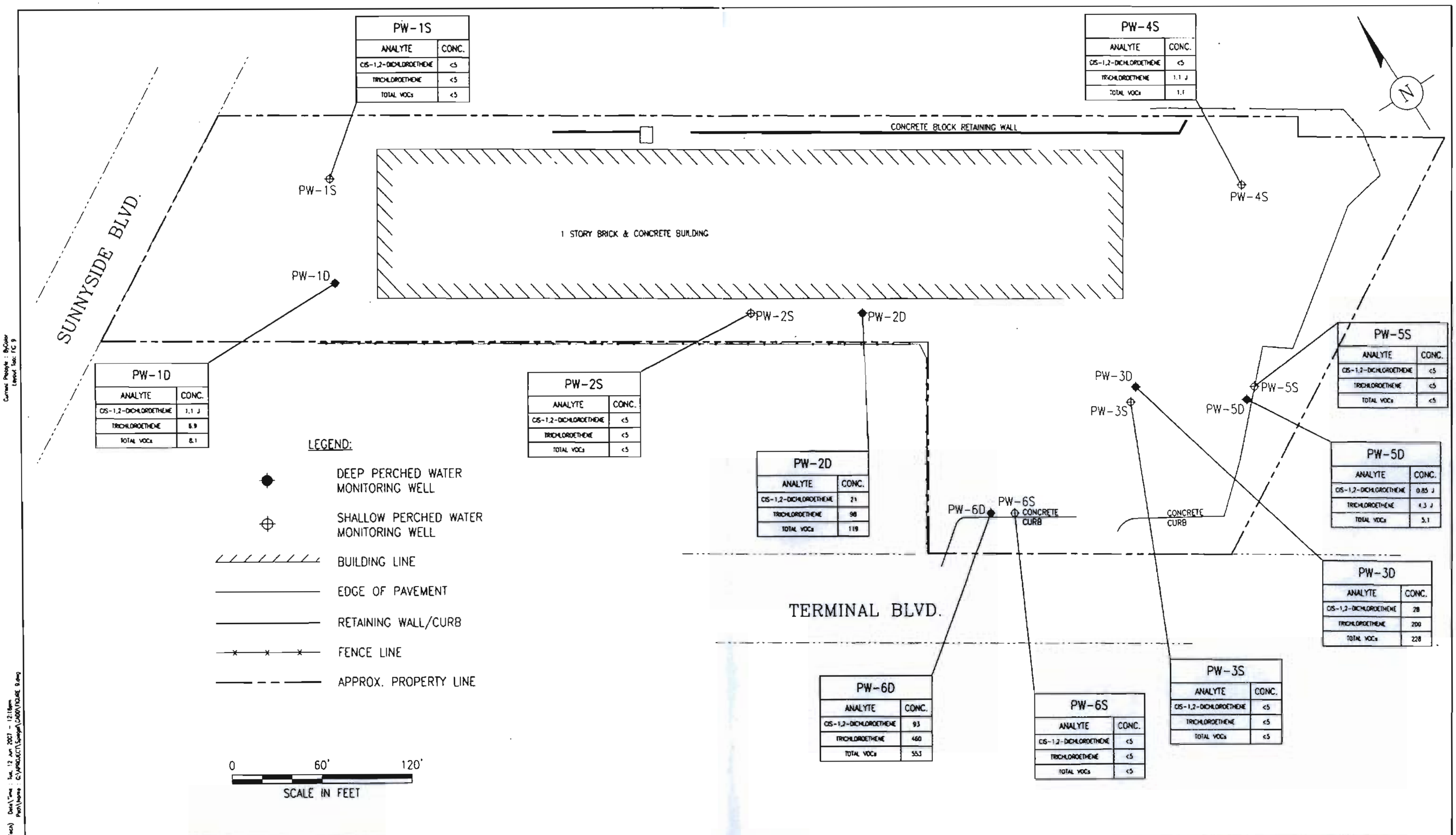
1. ANY STRUCTURES NOT YET VERIFIED IN FIELD ARE TAKEN FROM PLANS FROM JOHN A. GRAMMAS, P.E. (MINEOLA, N.Y.)
2. ELEVATIONS OF MONITORING WELLS TAKEN ON NORTH SIDE OF PVC WELL CASING AND MEASURED RELATIVE TO MEAN SEA LEVEL (MSL).

Site Plan / Source Area

540 Smith Street
East Farmingdale, N.Y.

P.W. GROSSER CONSULTING ENGINEER & HYDROGEOLOGIST, P.C.
630 Johnson Ave. Suite 7
Bohemia, N.Y. 11716-2618
Ph: 516 589-6353 Fx: 516 589-8705
E-mail: www.pwgrosser.com

Project: MIN9603	Designed By: JPR	Figure No: 2
CADD Operator: DLM/MF/JAK	Approved By: PWG	Date: 2/1/01



NO.	ISSUED DATE	REVISION DESCRIPTION	BY/CKD

KEYPLAN

SEAL

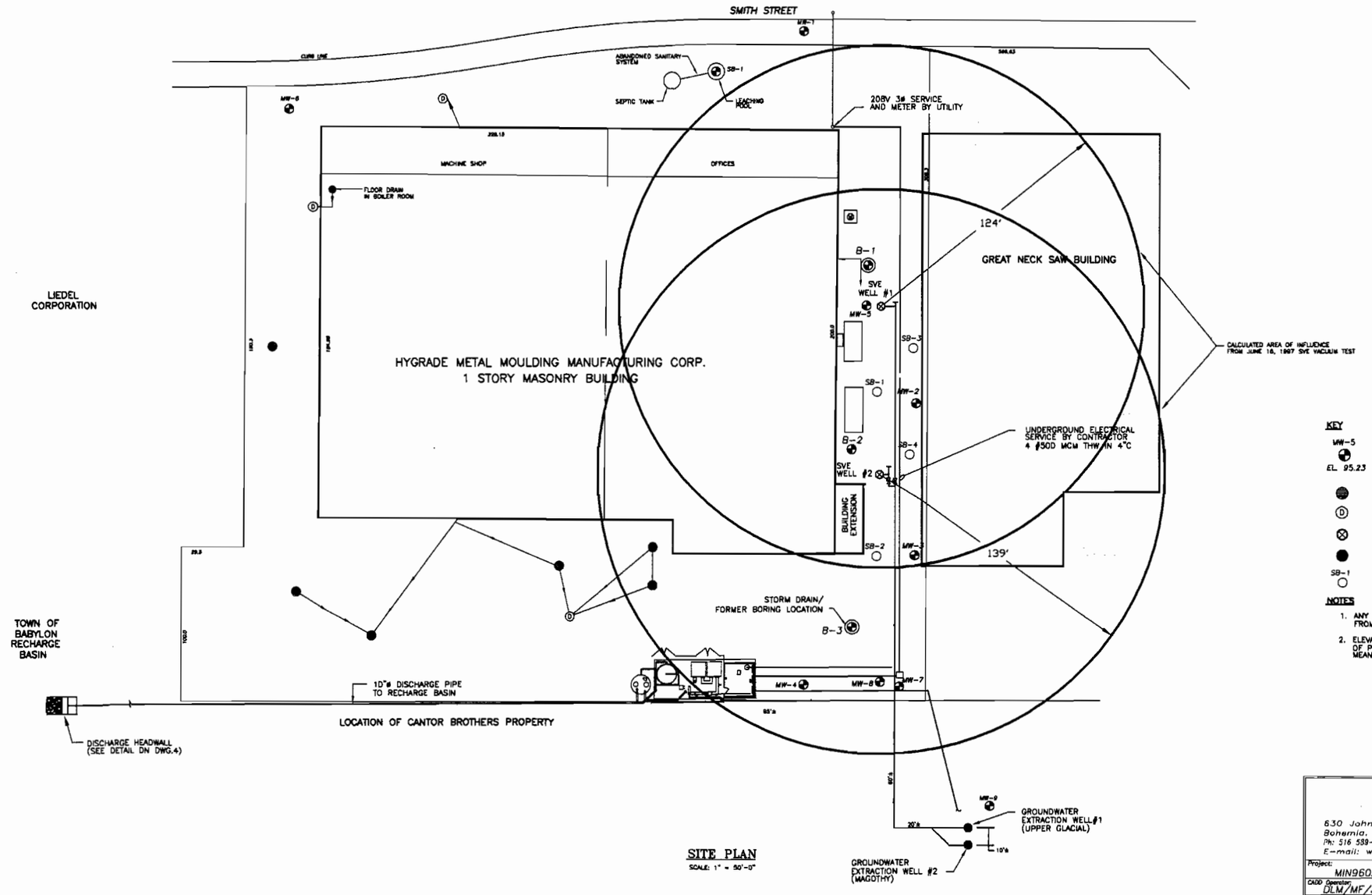
ARCADIS OF NEW YORK, INC.

Two Huntington Quadrangle
Suite 1S10
Melville, NY 11747
Tel: 631-249-7600 Fax: 631-249-7610
www.arcadis-us.com

PROJECT TITLE

131 SUNNYSIDE BOULEVARD
PLAINVIEW, TOWN OF OYSTER BAY
NASSAU COUNTY, NEW YORK

PROJECT MANAGER R. PORSCHE	DEPARTMENT MANAGER D. SMOLENSKY	LEAD DESIGN PROF.	CHECKED BY R. PORSCHE
SHEET TITLE VOC - IMPPACTED PERCHED WATER 131 SUNNYSIDE BOULEVARD PLAINVIEW, NEW YORK		TASK/PHASE NUMBER 00004	DRAWN BY A. SANCHEZ
		PROJECT NUMBER NY001422.0006	DRAWING NUMBER 9



SITE PLAN
SCALE: 1" = 50'-0"

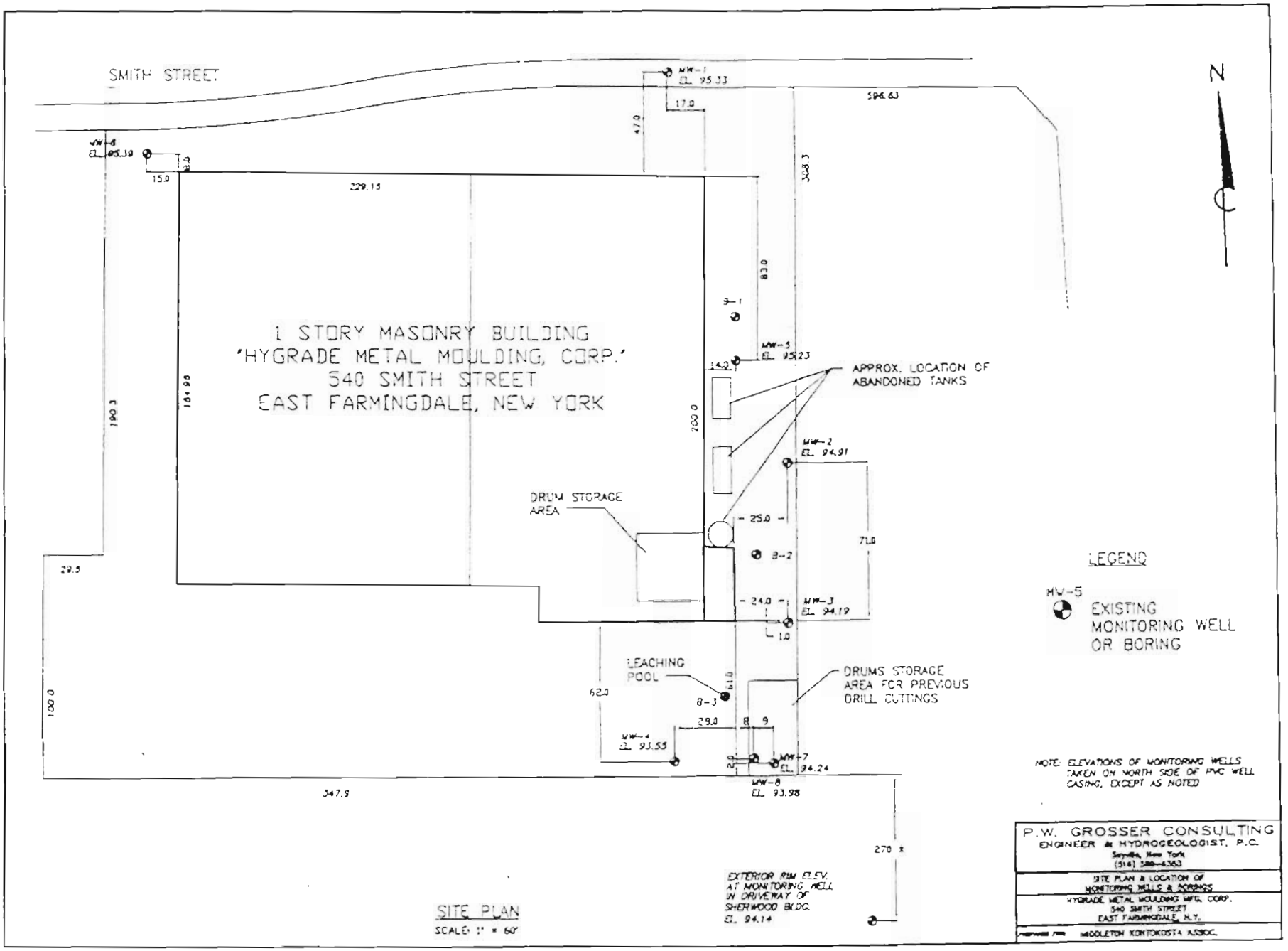
Site Plan / Source Area
Fourth Quarter 2000

540 Smith Street
East Farmingdale, N.Y.

630 Johnson Ave, Suite 7
Bohemia, N.Y. 11716-2618
Ph: 516 589-6353 Fx: 516 589-8705
E-mail: www.pwgrosser.com

Project:	Designed By:	Figure No:
MIN9603	JPR	2
CADD Operator: DLM/MF/JAK	Approved By: PWG	Date: 2/1/01

PWG\MIN\9603\GTREPORT\2000\2NDQTR\FIG-2


SMITH STREET
MW-1
EL. 95.33
596.63
17.0
47.0
308.3
MW-6
EL. 95.38
15.0
3.0
229.15
83.0
B-1
1 STORY MASONRY BUILDING
"HYGRADE METAL MOULDING, CORP."
540 SMITH STREET
EAST FARMINGDALE, NEW YORK
MW-5
EL. 95.23
14.2
APPROX. LOCATION OF
ABANDONED TANKS
100.3
184.95
200.0
MW-2
EL. 94.91
DRUM STORAGE
AREA
25.0
71.0
B-2
29.5
24.0
MW-3
EL. 94.19
1.0
LEACHING
POOL
61.0
DRUMS STORAGE
AREA FOR PREVIOUS
DRILL CUTTINGS
100.0
62.0
B-3
29.0
8
9
MW-4
EL. 93.55
MW-7
EL. 94.24
MW-8
EL. 93.98
347.9
270 ±
EXTERIOR RIM ELEV.
AT MONITORING WELL
IN DRIVEWAY OF
SHERWOOD BLDG.
EL. 94.14
N
LEGEND
MW-5
EXISTING
MONITORING WELL
OR BORING
NOTE: ELEVATIONS OF MONITORING WELLS
TAKEN ON NORTH SIDE OF PVC WELL
CASING, EXCEPT AS NOTED
SITE PLAN
SCALE: 1" = 60'
P.W. GROSSER CONSULTING
ENGINEER & HYDROGEOLOGIST, P.C.
Syosset, New York
(516) 580-4363
SITE PLAN & LOCATION OF
MONITORING WELLS & BORINGS
HYGRADE METAL MOULDING MFG. CORP.
540 SMITH STREET
EAST FARMINGDALE, N.Y.
PREPARED FOR: MIDDLETON KONTOKOSTA ASSOC.

From: Steven Scharf
To: Sara Heigel
Date: 10/10/2007 12:25:02 PM
Subject: Re: Minmilt

>>> Sara Heigel 10/10/2007 11:23:38 AM >>>
Hi Steve,
I'm putting the package together, but I can't find a site location map or a tax map. Do you have them? I did look in edocs and couldn't locate any there.
Let me know. Also, in the IC/EC module of the UIS the site address in not entered and I will also need a complete site contact list (description below).
Thanks.
Sara

"Site contact list" or "brownfield site contact list" means a list of persons, government agencies, groups, or organizations, including, but not limited to:

the chief executive officer and zoning board of each county, city, town and village in which such site is located. Suffolk county, Town of Bablyon.

the public water supplier which serves the area in which such site is located:
East Farmingdale Water district. — 72 Gazza Boulevard, Farmingdale, NY 11735

any site residents; None. this is an industrial park surrounded by cemeteries.

adjacent property owners.450 Smith St in Babylon (Town, Outside Of Villages), NY
480 Smith St, East Farmingdale, NY 11735
500 Smith St, East Farmingdale, NY 11735
550 Smith St, East Farmingdale, NY 11735
564 Smith St , East Farmingdale, NY 11735
570 Smith St, East Farmingdale, NY 11735
590 Smith St, East Farmingdale, NY 11735

any person who has requested to be placed on the site contact list: None.

the administrator of any school or day care facility located on the site for the purposes of posting and/or dissemination at the facility: None

. Provided, however, that where the site or adjacent real property contains multiple dwelling units, the remedial party may propose an alternative method, consistent with the citizen participation goals set forth in section 375-1.10, for providing such notice in lieu of mailing to each individual.

Judith A. Pascale
Suffolk County Clerk
310 Center Drive
Riverhead, NY. 11901-3392

Janice Tinsley-Colbert
Town of Babylon Clerk
200 East Sunrise Highway
Lindenhurst, NY 11757

Honorable
Steve Levy
County Executive Officer
H. Lee Dennison Building
100 Veterans Memorial Highway
P.O. Box 6100
Hauppauge, NY 11788-0099

Dear County Executive

Steven C. Bellone
Town Supervisor
Babylon Town Hall
200 East Sunrise Highway
Lindenhurst, NY 11757

Robert K. Sweeney
NYS Assembly
11th District
270-B North Wellwood Avenue
Lindenhurst, N.Y. 11757

David Bishop
Suffolk Legislator
277 S. Wellwood Avenue
Lindenhurst, NY 11757

SITE CLASSIFICATION WORKSHEET
STATE SUPERFUND PROGRAM
6 NYCRR 375-2.7

Site Name: Minmilt Realty Site **Site ID No. 1-52-147**

City/Town: Town of Babylon **County: Suffolk**

1. Has remediation been completed in accordance with a ROD including properly addressing institutional controls (ICs)?	X□ Yes (go to 7)	□ No (go to 2)	
2. Has hazardous waste as defined in ECL §27-1301.1 been disposed at the Site?	□ Yes (go to 3)	□ No (stop)	□ Unsure (go to 11)
3. Does the Site present a current or reasonably foreseeable significant threat to public health or the environment (complete Significant Threat Determination Worksheet)?	□ Yes (go to 4)	□ No (go to 6)	□ Unsure (go to 11)
4. Is the significant threat causing or presenting an imminent danger of causing irreversible or irreparable damage to public health or the environment?	□ Yes (Class 1)	□ No (go to 5)	□ Unsure (stop)
5. Is the Site presenting a significant but not imminent threat to public health or the environment?	□ Yes (Class 2)	□No (reevaluate)	
6. Has hazardous waste been disposed but it does not present a significant threat to public health or the environment and the site is suitable for placement on the Registry?	□ Yes (Class 3)	□No (go to 10)	
7. Is the site properly remediated but still requires continued active site management to maintain/achieve protectiveness?	X□ Yes (Class 4)	□ No (go to 8)	□ Unsure (stop)
8. Is the site properly remediated, does not require continued active site management, but is not suitable for delisting or a required IC is not yet in place?	□ Yes (Class 5)	□ No (go to 9)	□ Unsure (stop)
9. Is the site properly remediated, required ICs are in place, the site does not require continued active site management, and is suitable for delisting?	□ Yes (Class: C)	□ No (go to 10)	□ Unsure (stop)
10. Based upon investigation, is the degree of contamination such that the Site does not qualify to be placed on the Registry and that additional remedial work is not anticipated at this time?	□ Yes (Class: N)	□ No (reevaluate)	□ Unsure (stop)
11. Does insufficient information exist to properly classify the site?	□ Yes (Class P)	□ No (reevaluate)	□ Unsure (stop)

Current Classification: 2 Proposed Classification: 4

Additional Information to be Considered: A minor change was added to the project file to account for all the requirements of the ROD to allow for a reclassification to Class 4.

Steven Schaaf Env Engr II		6/20/07
Project Manager Name/Title - Print	Project Manager Name - Signature	Date
Chithibabu Vasudavan, EE4		9/13/07
Bureau Director/RHWRE Name/Title - Print	Bureau Director/RHWRE Name - Signature	Date

Significant Threat Worksheet

☐ State Superfund Program
6 NYCRR 375-2.7

☐ Brownfields Cleanup Program
ECL §27-1411.1(c)

Site Name: Minmilt Realty Site **Site ID No. 1-52-147**

City/Town: Town of Babylon **County: Suffolk County**

1.	Has all available and relevant evidence regarding the Site been reviewed and the factors in §375-2.7(a)(3) considered?	X☐ Yes (go to 2)	☐ No (stop)	☐ Unsure (stop)
2.	Does Site contamination result in significant adverse impacts (§375-2.7(a)(1)) to:			
	a. species that are endangered, threatened, or of concern?	☐ Yes (go to b)	x☐ No (go to b)	☐ Unsure (go to b)
	b. protected streams, tidal/freshwater wetlands, or significant fish and wildlife habitat?	☐ Yes (go to c)	x☐ No (go to c)	☐ Unsure (go to c)
	c. flora or fauna from bioaccumulation or leads to a recommendation to limit consumption?	☐ Yes (go to d)	x☐ No (go to d)	☐ Unsure (go to d)
	d. fish, shellfish, crustacea, or wildlife from concentrations that cause adverse/chronic effects?	☐ Yes (go to e)	x☐ No (go to e)	☐ Unsure (go to e)
	e. the environment due to a fire, spill, explosion, or reaction that generates toxic gases, vapors, fumes, mists or dusts?	☐ Yes (go to f)	x☐ No (go to f)	☐ Unsure (go to f)
	f. areas where individuals or water supplies may be present and NYSDOH has determined there to be a significantly increased risk to public health (including from soil vapor)?	☐ Yes (go to 3)	x☐ No (go to 3)	☐ Unsure (go to 3)
3.	Does Site contamination result in significant environmental damage (§375-2.7(a)(2))?	☐ Yes (go to 4)	x☐ No (go to 4)	☐ Unsure (stop)
4.	If any box in items 2 or 3 have been checked "Yes," the site presents a significant threat to public health or the environment; check here.	Significant threat to: ☐ Public Health ☐ Environment		
5.	If no boxes in items 2 or 3 have been checked "Yes," the site does not present a significant threat to public health or the environment; check here.	x☐ Not a Significant Threat		

Summary of Main Factors Contributing to this Determination: This site is under control with the soil vapor extraction system and the groundwater extraction and treatment system and quarterly monitoring. All the required vapor intrusion testing plans have been reviewed and approved by the DEC with concurrence from the NYSDOH. This site does not pose a significant threat pursuant to 6 NYCRR Part 375.

Steven Scharf ENV ENG II — Project Manager Name/Title (Print)

Project Manager Name (Signature)

06/20/07 — Date

Chithaboon Vasudevan, EE 4 — Bureau Director/RHWRE Name/Title (Print)

Bureau Director/RHWRE Name (Signature)

9/13/07 — Date

New York State Department of Environmental Conservation
Division of Environmental Remediation
Bureau of Technical Support, 11th Floor
625 Broadway, Albany, New York 12233-7020
Phone: (518) 402-9543 • **FAX:** (518) 402-9595
Website: www.dec.state.ny.us

Denise M. Sheehan
Commissioner

TO: Chittibabu Vasudevan
FROM: Kelly Lewandowski, BTS, DER
RE: Minmilt Realty - 152147
DATE: March 7, 2006

I am returning the Minmilt (152147) reclassification package to you since it does not appear to be ready to approve. This package had been returned by Sal Ervolino on April 6, 2005, with the notation that he would not approve until the groundwater standards are met or an institutional control was in place.

It is my understanding that Steve Scharf, PM, and Rosalie Rusinko have been working on an environmental easement. Once that has been finalized, you may resubmit for reclassification in accordance with the draft IGP#6.

Attachment

cc: S. Scharf
M. Barrie


Minacit
Realty
© 2007 Europa Technologies
Image © 2007 New York GIS
Google
Pointer 40°45'23.64" N 73°24'18.00" W elev 99 ft
Streaming
33%
Eye alt 2395 ft

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

In the Matter of the
Development and Implementation
of a Remedial Program for an
Inactive Hazardous Waste Disposal
Site, Under Article 27, Title 13,
and Article 71, Title 27 of the
Environmental Conservation Law
of the State of New York by

Minmilt Realty Corp.,

Respondent.

ORDER ON CONSENT
12-4-03

Index # W1-0669-02-08

Site # 1-52-147

File on eDOCs? ✓ Yes ___ No
Site Name Minmilt Realty
Site # 1-52-147
County Suffolk
Town Babylon
Foilable ✓ Yes ___ No
Please Write The eDOC File
Name Description Consentorder RDR

WHEREAS,

1. A. The New York State Department of Environmental Conservation (the "Department") is responsible for enforcement of Article 27, Title 13 of the Environmental Conservation Law of the State of New York ("ECL") entitled "Inactive Hazardous Waste Disposal Sites." The Department asserts that any person under order pursuant to ECL 27-1313.3.a has a duty imposed by ECL Article 27, Title 13 to carry out the Inactive Hazardous Waste Disposal Site Remedial Program committed to under order. The Department asserts that ECL 71-2705 provides that any person who fails to perform any duty imposed by ECL Article 27, Title 13 shall be liable for civil, administrative, and/or criminal sanctions.

B. The Department also asserts that it has the authority, *inter alia*, to provide for the prevention and abatement of all water, land, and air pollution. *See, e.g.*, ECL 3-0301.1.i.

C. This Order is issued pursuant to the Department's authority under, *inter alia,* ECL Article 27, Title 13, ECL Article 71, Title 27, and ECL 3-0301.

2. Minmilt Realty Corp. ("Respondent") is the current owner of the Site. The Site is located at 540 Smith Street, East Farmingdale, Town of Babylon, Suffolk County (hereinafter referred to as ("the Site"). Exhibit "A" of this Order is a map of the Site showing its general location. The Site is subject to Remedial Investigation/Feasibility Study Order on Consent Index # W1-0669-93-11 (the "RI/FS Order"). Nothing in this Order is intended to modify or abridge any rights or obligations under the RI/FS Order.

3. The Site is currently listed in the Registry of Inactive Hazardous Waste Disposal Sites in New York State as Site Number 1-52-147 with a Classification "2" pursuant to ECL 27-1305.

4. Respondent consents to the Department's issuance of this Order without (i) an admission or finding of liability, fault, wrongdoing, or violation of any law, regulation, permit, order, requirement, or standard of care of any kind whatsoever, or (ii) an acknowledgment that there has been a release or threatened release of hazardous waste or that the release or threatened release of hazardous waste at or from the Site constitutes a significant threat to public health or the environment.

5. The parties recognize that implementation of this Order will expedite the cleanup of the Site and may avoid prolonged and complicated litigation between the parties, and that this Order is mutually acceptable, fair, reasonable, and in the public interest.

6. Solely with regard to the matters set forth below, Respondent hereby waives its right to a hearing herein as provided by law, consents to the issuance and entry of this Order, and agrees to be bound by its terms. Respondent consents to and agrees not to contest the authority or jurisdiction of the Department to issue or enforce this Order, and agrees not to contest the validity of this Order or its terms, or the validity of the data generated by Respondent pursuant to this Order.

NOW, having considered this matter and being duly advised, **IT IS ORDERED THAT**:

I. Initial Submittal

Within thirty (30) Days after the effective date of this Order, Respondent shall submit to the Department a Records Search Report in accordance with the requirements of Exhibit "F" attached hereto. The Records Search Report can be limited if the Department notifies Respondent that prior submissions satisfy specific items required for the Records Search Report. Such Records Search Report shall be submitted in a format acceptable to the Department.

II. Development, Performance, and Reporting of Work Plans

A. Work Plans

All activities at the Site that comprise any element of an Inactive Hazardous Waste Disposal Site Remedial Program shall be conducted pursuant to one or more Department-approved work plans ("Work Plan" or "Work Plans") and this Order. The Work Plan(s) under this Order shall be developed and implemented in accordance with CERCLA, the NCP, and all applicable statutes, regulations, and guidance documents then in effect. All Department-approved Work Plans shall be incorporated into and become an enforceable part of this Order and shall be attached as Exhibit "B." Upon approval of a Work Plan by the Department, Respondent shall implement such Work Plan in accordance with the schedule contained in such Work Plan. Nothing in this

Subparagraph shall mandate that any particular Work Plan be submitted. Further, each Work Plan submitted shall use one of the following captions on the cover page:

1. "Site Characterization Work Plan" ("SC Work Plan"): a Work Plan the objective of which is to identify the presence of any hazardous waste disposed of at the Site. Such Work Plan shall be developed in accordance with Exhibit "G";

2. "Remedial Investigation/Feasibility Study Work Plan" ("RI/FS Work Plan"): a Work Plan the objective of which is to perform a Remedial Investigation and a Feasibility Study. Such Work Plan shall be developed and implemented in accordance with the requirements set forth in Exhibit "H";

3. "IRM Work Plan": a Work Plan the objective of which is to provide for an Interim Remedial Measure. Such Work Plan shall be developed in accordance with Exhibit "I";

4. "Remedial Design/Remedial Action Work Plan" ("RD/RA Work Plan"): a Work Plan the objective of which is to provide for the development and implementation of the final plans and specifications for implementing the remedial alternative set forth in the ROD. Such Work Plan shall be developed in accordance with Exhibit "J"; or

5. "OM&M Work Plan": a Work Plan the objective of which is to provide for all activities required to maintain and monitor the effectiveness of the Remedial Action or an IRM. Such Work Plan shall be developed in accordance with Exhibit "K."

B. Submission/Implementation of Work Plans

1. (a) The OM&M Work Plan shall be submitted to the Department within sixty (60) Days after the effective date of this Order.

(b) The Department may request that Respondent submit such other, additional, or supplemental Work Plans as are appropriate to advance the Remedial Program at the Site. Within thirty (30) Days after the Department's written request, Respondent shall advise the Department in writing whether it will submit and implement the requested additional Work Plan (or Supplemental Work Plan) or whether it elects to terminate this Order pursuant to Paragraph XIII. If Respondent elects to submit and implement such Work Plan, Respondent shall submit a Work Plan providing for implementation of the activities requested within sixty (60) Days after such election. If Respondent elects to terminate this Order or fails to make a timely election, this Order shall terminate pursuant to Paragraph XIII.

(c) Respondent may, at Respondent's option, propose one or more additional or supplemental Work Plans (including one or more IRM Work Plans) at any time, which Work Plan(s) shall be reviewed for appropriateness and technical sufficiency.

(d) Any request made by the Department under Subparagraph II.B.1.(b) shall be subject to dispute resolution pursuant to Paragraph XII.

2. A Professional Engineer must prepare, sign, and seal all Work Plans other than a Work Plan for an RI/FS or an SC.

3. During all field activities, Respondent shall have on-Site a representative who is qualified to supervise the activities undertaken. Such representative may be an employee or a consultant retained by Respondent to perform such supervision.

C. Revisions to Work Plans

The Department shall notify Respondent in writing if the Department determines that any element of a Department-approved Work Plan needs to be modified in order to achieve the objectives of the Work Plan as set forth in Subparagraph II.A or to ensure that the Remedial Program otherwise protects human health and the environment. Upon receipt of such notification, Respondent shall, subject to Respondent's right to invoke dispute resolution pursuant to Paragraph XII, submit a Work Plan for such requested work to the Department within sixty (60) Days after the date of the Department's written notice pursuant to this Subparagraph.

D. Submission of Final Reports and Annual Reports

1. In accordance with the schedule contained in a Work Plan, Respondent shall submit a final report which includes the caption of that Work Plan on the cover page and a certification that all requirements of the Work Plan have been complied with and all activities have been performed in full accordance with such Work Plan. Such certification shall be by the person with primary responsibility for the day to day performance of the activities under this Order and, except for RI and SC final reports, shall be by a Professional Engineer.

2. In the event a final report sets forth construction activities performed during the implementation of a Work Plan, such final report shall include "as built" drawings showing all changes made to the remedial design or the IRM.

3. In the event that the ROD for the Site, if any, or any Work Plan for the Site requires operation, maintenance, and monitoring (OM&M), including reliance upon institutional or engineering controls, Respondent shall submit an annual report by the 1st Day of the month following the anniversary of the start of the OM&M.

Respondent shall file such annual report until the Department determines that the Site can be closed out and so notifies Respondent in writing. Such annual report shall be signed by a Professional Engineer and shall contain a certification that any institutional and engineering controls put in place pursuant to this Order are still in place, have not been materially altered, and are still effective in achieving their objectives. Respondent shall notify the Department within twenty-four (24) hours of discovery of any upset, interruption, or termination of such controls without the prior approval of the Department. Further, Respondent shall take all actions required by the Department to maintain conditions at the Site that achieve the objectives of the Remedial Program and are protective of public health and the environment. An explanation of such upset, interruption, or termination of one or more controls and the steps taken in response shall be included in the foregoing notice and in the annual report required by this Subparagraph, as well as in any progress reports required by Paragraph III. Respondent can petition the Department for a determination that the institutional and/or engineering controls may be terminated. Such petition must be supported by a Professional Engineer stating that such controls are no longer necessary for the protection of public health and the environment. The Department shall not unreasonably withhold its approval of such petition.

E. Review of Submittals other than Progress Reports and Health and Safety Plans

1. The Department shall make a good faith effort to review and respond to each of the submittals Respondent makes pursuant to this Order within sixty (60) Days. The Department's response shall include an approval or disapproval of the submittal, in whole or in part, and notification to Respondent of the Department's determination. All Department-approved submittals shall be incorporated into and become an enforceable part of this Order.

2. If the Department disapproves a submittal, it shall specify the reasons for its disapproval. Within thirty (30) Days after the date of the Department's written notice that Respondent's submittal has been disapproved or rejected, Respondent shall elect, in writing and subject to Subparagraph II.E.3, to either (i) modify the submittal to address the Department's comments, or (ii) invoke dispute resolution pursuant to Paragraph XII. If Respondent elects to modify the submittal, Respondent shall, within sixty (60) Days after such election, make a revised submittal to the Department that addresses all of the Department's stated reasons for disapproving the first submittal. In the event that Respondent's revised submittal is disapproved, Respondent shall be in violation of this Order unless it invokes dispute resolution pursuant to Paragraph XII and its position prevails. Failure to make an election or failure to comply with the election is a violation of this Order.

under this Order, which costs have been paid by Respondent, including reimbursement of State Costs pursuant to this Order.

K. All activities undertaken by Respondent pursuant to this Order shall be performed in accordance with the requirements of all applicable Federal and State laws, regulations, and guidance documents.

L. Unless otherwise expressly provided herein, terms used in this Order which are defined in ECL Article 27, Title 13 or in regulations promulgated under such statute shall have the meaning assigned to them under said statute or regulations. Whenever terms listed in the Glossary attached hereto are used in this Order or in the attached Exhibits, the definitions set forth in the Glossary shall apply. In the event of a conflict, the definition set forth in the Glossary shall control.

M. Respondent's obligations under this Order represent payment for or reimbursement of response costs, and shall not be deemed to constitute any type of fine or penalty.

N. This Order may be executed for the convenience of the parties hereto, individually or in combination, in one or more counterparts, each of which for all purposes shall be deemed to have the status of an executed original and all of which shall together constitute one and the same.

O. The effective date of this Order is the 10th Day after the date the Commissioner or the Commissioner's designee signs this Order.

DATED: DEC - 4 2003

ERIN M. CROTTY
Commissioner
New York State Department
of Environmental Conservation

By: _____
Dale A. Desnoyers
Director
Division of Environmental Remediation

New York State Department of Environmental Conservation
Division of Environmental Remediation, 11th Floor
625 Broadway, Albany, New York 12233-7015
Phone: (518) 402-9620 • **FAX:** (518) 402-9022

MEMORANDUM

TO: Chittibabu Vasudevan, P.E. Chief, Remedial Bureau A
Thru: John Swartwout, P.E. Section Chief

FROM: Steven M. Scharf, P.E. Project Engineer

SUBJECT: Minmilt Realty, Suffolk County Site No 1-52-147.
RE: Minor changes to the Minmilt Realty Record of Decision

DATE: May 10, 2007

The Minmilt Realty site (Minmilt), formerly known as the Hygrade Metals, is a Class 2 site on the Registry of Inactive Hazardous Waste Disposal sites. Currently, Minmilt, in the operation maintenance and monitoring (O,M&M) phase, has an approved O,M&M plan. The purpose of this memo is to document several minor changes to the Record of Decision (ROD), making unnecessary the two deed restrictions and clearing the way for reclassification of the Minmilt Realty site to Class 4.

The Minmilt Record of Decision (ROD) calls for:

1. A remedial design program that will provide the details necessary for the operation and maintenance, and monitoring of the remedial program.

2. Operation of the SVE system until the site soils achieve NYSDEC Technical Assistance and Guidance Memorandum (TAGM) No. 4046 cleanup values for soils. Prior to closure, the SVE system will be pulsed by turning on and off the individual wells. Once the concentrations of each vapor extraction well approaches non-detect levels, the SVE system will be shut down. Soil samples will then be taken and analyzed for VOCs to demonstrate that NYSDEC TAGM 4046, or any subsequent soil cleanup criteria, have been achieved.

3. Operation of the downgradient groundwater extraction and treatment system that intercepts the entire contaminated groundwater plume until 6 NYCRR Part 700 Groundwater standards or site background concentrations are met for on-site groundwater; unless operating data indicates that this is technically impractical. Final shutoff will occur with the concurrence of the NYSDEC and NYSDOH.

4. Implementation of an operation, maintenance and monitoring program that will verify the

effectiveness of the treatment system(s) to be detailed in an approved operation, maintenance and monitoring (OM&M) plan for the site. Final shutdown procedures will also be detailed in this OM&M plan. This includes an iron scaling prevention program for the groundwater recovery wells.

5. Institutional controls in the form of existing use and development restrictions limiting the use of groundwater from the affected areas as potable or process water unless the necessary water quality treatment is approved by the Suffolk County Department of Health Services.

6. Deed restrictions to be recorded in the chain of title of the property to restrict the future use of the site for industrial use only and notify the NYSDEC of any intrusive activities planned for the impacted areas.

7. The property owner will certify annually to the NYSDEC that these institutional controls are in place and that long term monitoring is being conducted as required by the remedy.

8. After approval and implementation of the OM&M plan, the NYSDEC will reclassify the Site from a Class 2 to a Class 4 on the New York State Registry of Inactive Hazardous Waste Disposal Sites. A Class 4 site means that a site has been properly closed but requires continued monitoring.

Minor changes are defined as having little or no impact on the remedy selected in the ROD where the project manger defines the change(s) and the basis for the change. The Minmilt groundwater and soil vapor extraction (SVE) remedial system(s) have been successful at cleaning the soils. The O,M and M plan, approved by the DEC with DOH concurrence, includes all the NYSDOH legacy requirements for vapor intrusion with four quarters of indoor air monitoring, vapor intrusion evaluation and a sub-slab soil gas survey to be implemented once the soil vapor extraction system is proposed to be shut down. NYSDOH also concurs with the reclassification of the site to class 4.

The Minmilt Site is a commercial building located in an industrial park with "E Business" zoning. The Town of Babylon Zoning ordinance precludes residential use in this area and would require a special exemption from the Board of Appeals for sensitive uses such as day care centers. Based on the sampling already taken, the site soil, groundwater and soil gas should be completely remediated to the DEC/DOH satisfaction. Therefore, it is unnecessary to require further land use controls via a deed restriction.

The Suffolk County Department of Health Services (SCDHS) requires a well permit that covers the installation and the water quality determination prior to using groundwater for commercial/residential use and/or consumption. The area is also serviced by the East Farmingdale Water District. Therefore, the deed restriction regarding the well water use duplicates the SCDHS enforcement already in place and is unnecessary.

In conclusion, the objectives of the remedy elements 5 and 6 have already been met so implementation of the specific institutional controls described in the ROD are no longer necessary.

cc: J. Swartwout/S. Scharf/File
ec: EDOCS-1-52-147, Region 1, Suffolk, Babylon
W. Parish, Region 1
K. Lewindowski, BTS
M. Barry, BTS

Department of Environmental Conservation

Division of Environmental Remediation

Record of Decision

Minmilt Realty Site
Town of Babylon, Suffolk County
Site Number 1-52-147

March 2002

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

DECLARATION STATEMENT - RECORD OF DECISION

Minmilt Realty Site
Town of Babylon, Suffolk County, New York
Site No. 1-52-147

Statement of Purpose and Basis

The Record of Decision (ROD) presents the selected remedy for the Minmilt Realty Class 2 Inactive Hazardous Waste Disposal Site which was chosen in accordance with the New York State Environmental Conservation Law. The remedial program selected is not inconsistent with the National Oil and Hazardous Substances Pollution Contingency Plan of March 8, 1990 (40CFR300).

This decision is based on the Administrative Record of the New York State Department of Environmental Conservation (NYSDEC) for the Minmilt Realty Inactive Hazardous Waste Disposal Site and upon public input to the Proposed Remedial Action Plan (PRAP) presented by the NYSDEC. A listing of the documents that are included in the Administrative Record is included in Appendix B of the ROD.

Assessment of the Site

Actual or threatened release of hazardous waste constituents from this site have been addressed by implementing the interim remedial measures identified in this ROD. The removal of the contaminated storm drain sediments and the ongoing soil vapor extraction system has significantly reduced the threat to public health and the environment. Therefore, the site will no longer represent a current or potential significant threat to public health and the environment upon satisfactory completion of the operation of the soil vapor extraction system.

Description of Selected Remedy

Based on the results of the Remedial Investigation (RI) and the ongoing operation of the interim remedial measure (IRM) for the Minmilt Realty, the NYSDEC has selected source area remediation and continued monitoring as the remedy for the site. The components of the remedy are as follows:

- Continued operation of the soil vapor extraction (SVE) system. Confirmatory samples will be taken to demonstrate that NYSDEC Technical and Administrative Guidance Memorandum (TAGM) 4046, Soil Cleanup Objectives have been achieved;
-
- Continued operation of the existing groundwater extraction and treatment system;

- A comprehensive operation, maintenance and monitoring program that includes sampling of groundwater, air emissions and soil;

- Appropriate institutional controls and deed restrictions.

- The property owner will certify annually to the NYSDEC that the institutional controls are in place and that long term monitoring is being conducted as required by the remedy.

New York State Department of Health Acceptance

The New York State Department of Health concurs with the remedy selected for this site as being protective of human health.

Declaration

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

3/26/02
Date

Michael J. O'Toole, Jr., Director
Division of Environmental Remediation

New York State Department of Environmental Conservation
Division of Environmental Remediation
Remedial Action Bureau A (BURA), 11th Floor
625 Broadway, Albany, New York 12233-7015
Phone: (518) 402-9620 • **FAX:** (518) 402-9627
Website: www.dec.state.ny.us

Erin M. Crotty
Commissioner

January 31, 2005

Frank Castellano
P.W. Grosser Consulting Engineer & Hydrogeologist, P.C.
& Hydrogeologist, P.C.
630 Johnson Avenue, Suite 7
Bohemia, New York 11716-2618

RE: Minmilt Realty Site, Suffolk County
NYSDEC Site ID No 1-52-147

Dear Mr. Castellano:

P.W. Grosser, Consulting Engineer and Hydrogeologist, on behalf of the Minmilt Realty Corporation has submitted the revised Operation, Maintenance and Monitoring (O,M,&M) Plan for the Minmilt Realty Site.. Based on the review of this revised plan, the New York State Department of Environmental Conservation (NYSDEC) approves this plan. This revised O,M,&M plan can become an attachment to the remedial design and remedial action order on consent for the Minmilt Realty Site.

Pursuant to our discussions on the revised O&M Manual, PW Grosser can submit the quarterly and annual reports, referenced on page 21, Section 6 of the O&M manual, in electronic PDF format in lieu of printed copies. Now that the O,M&M plan has been finalized, the NYSDEC will initiate the process of reclassifying the Minmilt Realty Site to Class 4 Site. The ultimate goal upon successful site remediation, is to delist the Minmilt Realty site from the Registry of Inactive Hazardous Waste Disposal Sites.

If you have any questions in the interim, please contact me at (518)402-9620.

Sincerely,

/S/

Steven M. Scharf, P.E.
Project Engineer
Remedial Action Bureau of Eastern
Division of Environmental Remediation (OM&M.wpd)

c: B. Devaux, PW Grosser, (Via E-mail)
R. Cole, Minmilt Realty
W. Parish, NYSDEC Region 1, (Via E-mail)

bc: J. Swartwout/S. Scharf/File

TABLE 3
Third Quarter Groundwater Sampling Results
September 21, 2004

PARAMETER	Units	MW#1	MW#2	MW#3	MW#4	MW#5	MW#6	MW#7	MW#8	MW#9	NYSDEC G.W. Standards
1,1 Dichloroethene	ug/L	ND	ND	ND	ND	ND	ND	ND	NS	ND	5
1,1 Dichloroethane	ug/L	ND	ND	ND	ND	ND	ND	ND	NS	ND	5
Chloroform	ug/L	ND	ND	ND	ND	ND	ND	ND	NS	ND	5
111 Trichloroethane	ug/L	ND	ND	ND	ND	ND	ND	ND	NS	ND	5
Trichloroethylene	ug/L	ND	ND	ND	ND	ND	ND	ND	NS	11	5
Tetrachloroethene	ug/L	ND	3	ND	3	ND	2	2	NS	ND	5
c-1,2-Dichloroethene	ug/L	ND	ND	17	ND	ND	ND	ND	NS	ND	5
t-1,2-Dichloroethene	ug/L	ND	ND	ND	ND	ND	ND	ND	NS	ND	5
Ethylbenzene	ug/L	ND	ND	ND	ND	ND	ND	ND	NS	ND	5
Toluene	ug/L	ND	ND	ND	ND	ND	ND	ND	NS	ND	5
o Xylene	ug/L	ND	ND	ND	ND	ND	ND	ND	NS	ND	5
m + p Xylene	ug/L	ND	ND	ND	ND	ND	ND	ND	NS	ND	5
TVOC's	ug/L	0	3	17	3	0	2	2	NS	11	

PARAMETER	Units	SP#1	SP#2	SP#3	SP#4	SP#5	SP#6	GW#1	GW#2	GW#3	GW#4	SCDHS Well	NYSDEC G.W. Standards
1,1 Dichloroethene	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5
1,1 Dichloroethane	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5
111 Trichloroethane	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5
Trichloroethylene	ug/L	1	ND	3	ND	ND	ND	ND	ND	ND	ND	5	5
Tetrachloroethene	ug/L	ND	ND	2	4	5	ND	ND	2	4	ND	6	5
c-1,2-Dichloroethene	ug/L	ND	ND	ND	2	ND	ND	ND	ND	ND	ND	ND	5
t-1,2-Dichloroethene	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5
1,2 Dichlorobenzene	ug/L	ND	ND	ND	ND	ND	3	ND	ND	ND	ND	ND	5
124-Trimethylbenzene	ug/L	ND	ND	ND	ND	ND	4	ND	ND	ND	ND	ND	5
Benzene	ug/L	ND	ND	ND	ND	ND	ND	ND	8	ND	ND	ND	0.4
Ethylbenzene	ug/L	ND	ND	ND	ND	ND	2	ND	ND	ND	ND	ND	5
m+p Xylene	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5
o Xylene	ug/L	ND	ND	ND	ND	ND	1	2	ND	1	1	ND	5
Toluene	ug/L	ND	ND	ND	ND	ND	ND	2	ND	2	1	ND	5
TVOC's	ug/L	1	0	5	6	5	10	4	10	7	2	11	

ND = Not Detected
NS= Not Sampled
G.W. Standards - Ambient Water Quality Standards or Guidance Values, 1993

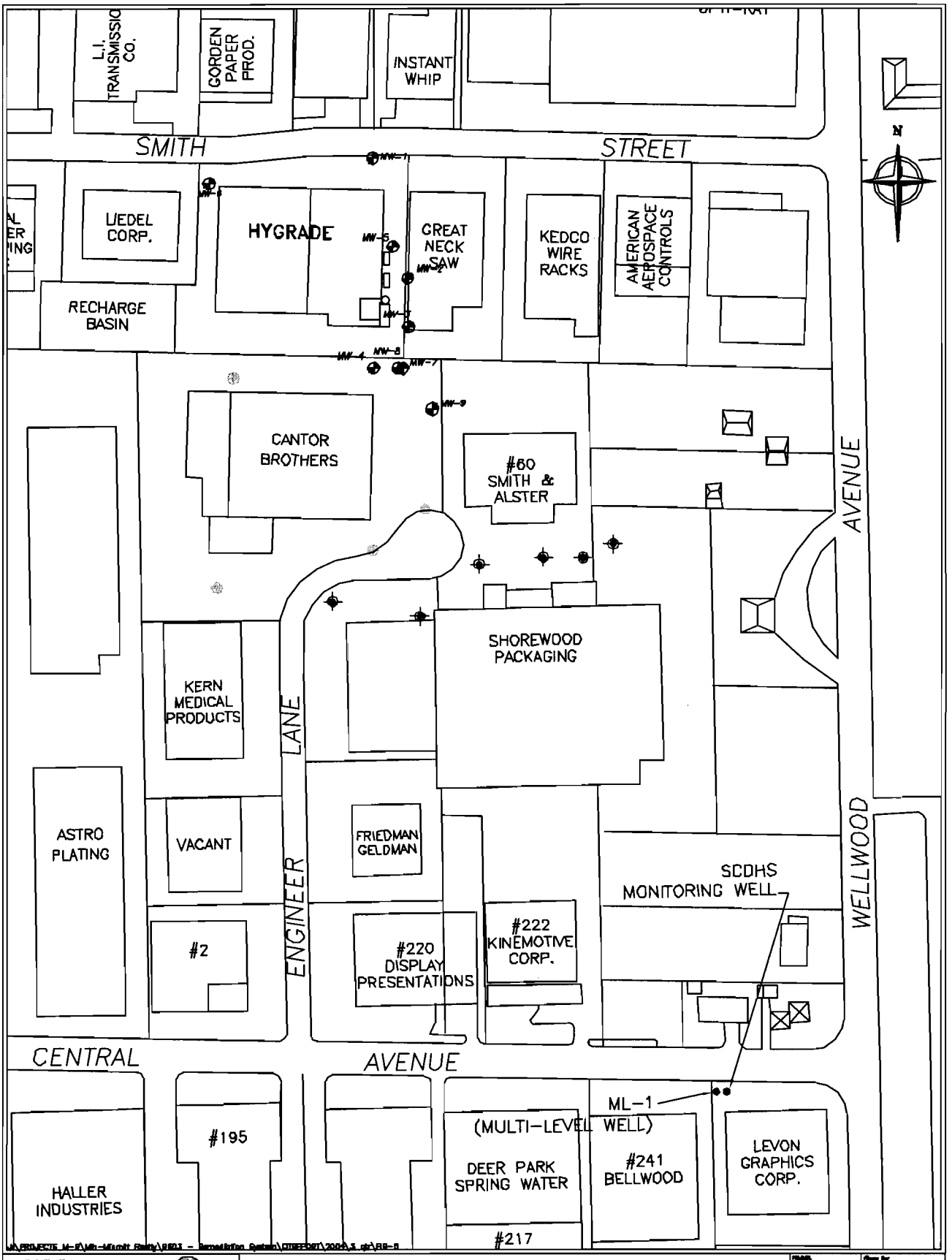
TABLE 6
History of SVE Influent Concentrations

PARAMETER	Units	Combined SVE Influent 3/7/97	Combined SVE Influent 6/25/97	Combined SVE Influent 09/26/1997	Combined SVE Influent 12/18/1997	Combined SVE Influent 03/17/1998	Combined SVE Influent 04/21/1998	SVE-1 Influent 07/07/1998	SVE-1 Influent 07/08/1998	SVE-2 Influent 08/05/1998	SVE-2 Influent 09/17/1998	Combined SVE Influent 12/29/1998	Combined SVE Influent 03/24/1999	Combined SVE Influent 06/29/1999	Combined SVE Influent 11/01/1999	Combined SVE Influent 12/16/1999	NYDEC Air Guidance	
																	SGC	AGC
c-1,2-Dichloroethene	ug/m^3	30,000	900	830	560	340	370	310	740	1,100	930	1,600	390	720	660	180	190,000	1,900
111 Trichloroethane	ug/m^3	12,000	650	560	230	97	64	45	27	57	52	47	38	37	37	17	450,000	1,000
Trichloroethylene	ug/m^3	88,000	2,300	2,600	2,900	570	340	170	200	520	380	1,200	150	620	360	170	33,000	0.450
Trichlorofluoromethane	ug/m^3	BDL	BDL	BDL	BDL	BDL	28	20	19	16	21	25	BDL	7	17	BDL	560,000	700.000
1,1 Dichloroethane	ug/m^3	BDL	BDL	BDL	BDL	BDL	15	25	12	25	BDL	28	20	19	28	13	190,000	500.000
Tetrachloroethene	ug/m^3	3,600,000	200,000	160,000	150,000	20,000	5,200	1,900	2,800	2,700	2,200	2,300	540	1,400	1,500	1,100	81,000	0.075
TVOCs	ug/m^3	**3,730,000**	**203,850**	**163,990**	**153,690**	**21,007**	**6,017**	**2,470**	**3,798**	**4,418**	**3,583**	**5,200**	**1,138**	**2,803**	**2,602**	**1,480**	NA	NA

PARAMETER	Units	Combined SVE Influent 03/21/2000	Combined SVE Influent 08/03/2000	Combined SVE Influent 12/21/2000	Combined SVE Influent 03/29/2001	Combined SVE Influent* 06/28/2001	Combined SVE Influent* 09/27/2001	Combined SVE Influent 10/15/2001	Combined SVE Influent 03/26/2002	Combined SVE Influent 06/26/2002	Combined SVE Influent 09/26/2002	Combined SVE Influent 01/03/2003	Combined SVE Influent 07/07/2003	Combined SVE Influent 09/30/2003	Combined SVE Influent 12/15/2003	Combined SVE Influent 03/30/2004	NYSDEC Air Guidance Concentrations	
																	SGC	AGC
c-1,2-Dichloroethene	ug/m^3	60	240	79	120	540	450	BDL	98	61	44	66	200	93	58	370	190,000	1,900
111 Trichloroethane	ug/m^3	8	37	6	BDL	BDL	22	BDL	12	10	BDL	11	BDL	32	BDL	16	450,000	1,000
Trichloroethylene	ug/m^3	170	220	230	100	520	4,300	350	340	81	24	29	30	30	20	890	33,000	0.450
Trichlorofluoromethane	ug/m^3	BDL	27	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	560,000	700.000
1,1 Dichloroethane	ug/m^3	7	25	6	10	BDL	16	BDL	12	8	BDL	16	100	BDL	BDL	BDL	190,000	500.000
Tetrachloroethene	ug/m^3	1,200	620	400	420	6,300	18,000	610	1,600	710	450	360	150	100	31	14,000	81,000	0.075
TVOCs	ug/m^3	**1,445**	**1,169**	**721**	**650**	**7,360**	**22,788**	**960**	**2,062**	**870**	**518**	**482**	**480**	**255**	**109**	**15,276**	NA	NA

PARAMETER	Units	Combined SVE Influent 05/17/2004	Combined SVE Influent 09/24/2004	NYSDEC Air Guidance Concentrations	
				SGC	AGC
c-1,2-Dichloroethene	ug/m^3	34	11	190,000	1,900
111 Trichloroethane	ug/m^3	BDL	BDL	450,000	1,000
Trichloroethylene	ug/m^3	8	BDL	33,000	0.450
Trichlorofluoromethane	ug/m^3	BDL	BDL	560,000	700.000
1,1 Dichloroethane	ug/m^3	BDL	BDL	190,000	500.000
Tetrachloroethene	ug/m^3	26	16	81,000	0.075
TVOCs	ug/m^3	**68**	**27**	NA	NA

SGC = Short-Term Guideline Concentrations (ug/m^3)
AGC = Annual Guideline Concentrations (ug/m^3)
NA = Not Applicable
BDL= Below Detection Limit. Based on a reduction in concentrations, additional compounds have been detected in more recent analyses performed.
***** - Second Quarter 2001-Laboratory method changed from air sampling with carbon tubes to air sampling with 'porapak-N' tubes. Increase from 1st qtr 2001 to 2nd qtr 2001 may reflect this change.

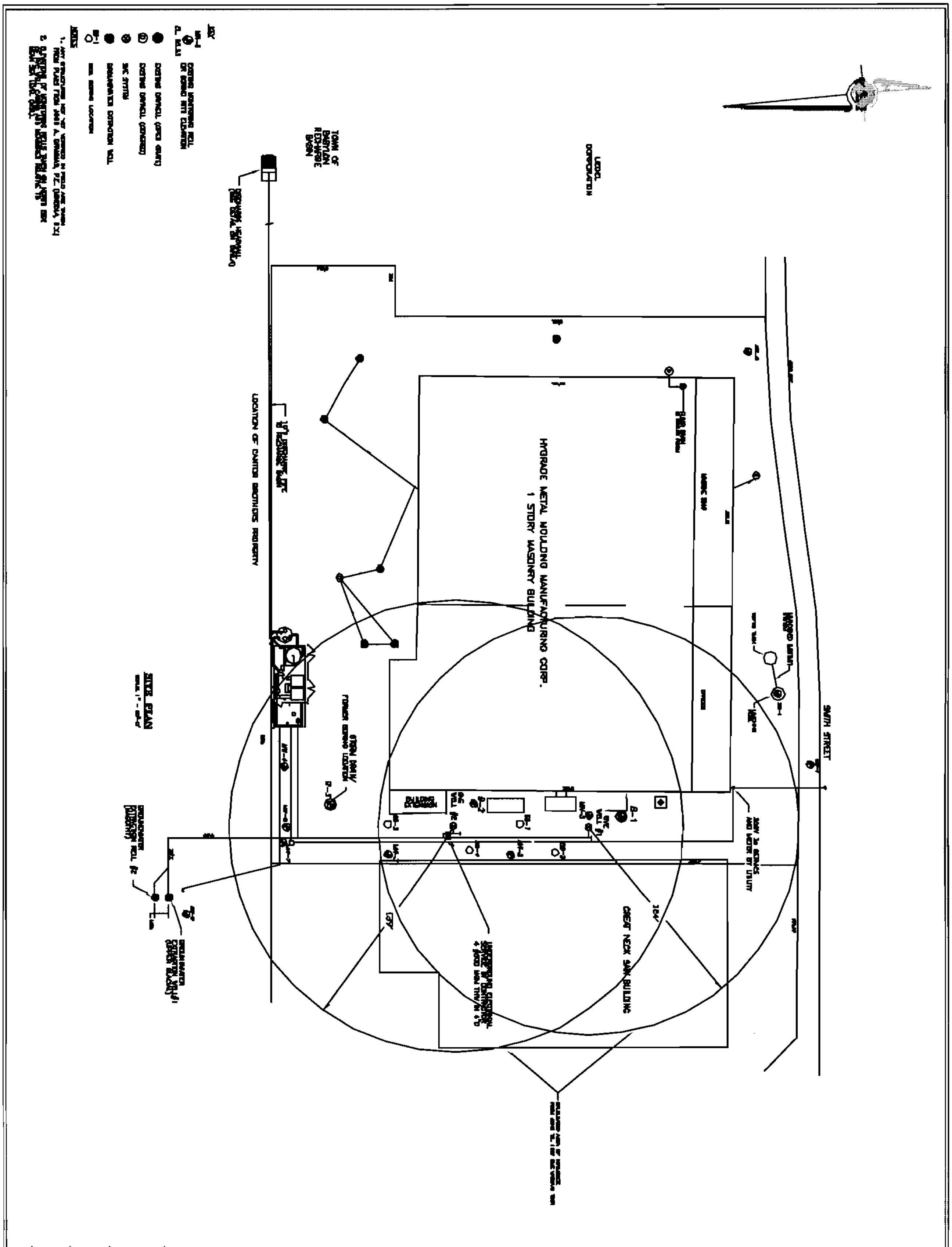


PWGC

LOCATION MAP OF SCDHS WELL
540 SMITH STREET
EAST FARMINGDALE, NY

5

01-11-05



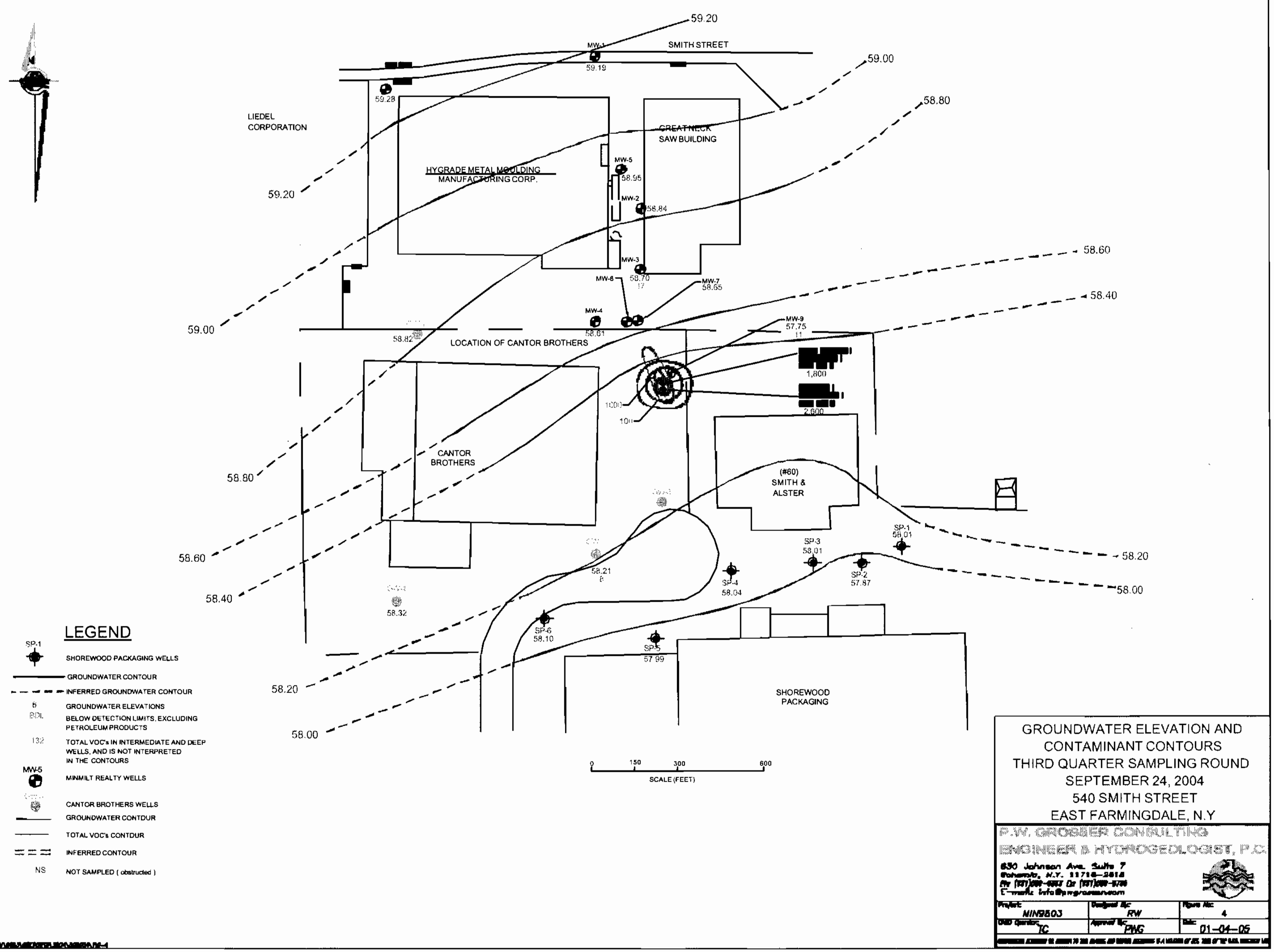
J-ALL\MMR603\REPORT\3QUART.2002\FIG.2

P.W. GROSSER CONSULTING
ENGINEER & HYDROGEOLOGIST, P.C.
630 Johnson Ave, Suite 7
Bohemia, N.Y. 11716-2618

Site Plan / Source Area

649 Smith Street
East Farmingdale, N.Y.

Project: MMR603	Figure No. 2
Approved by: PWG	
Drawn by: KF	Date: 12/16/02



GROUNDWATER ELEVATION AND
CONTAMINANT CONTOURS
THIRD QUARTER SAMPLING ROUND
SEPTEMBER 24, 2004
540 SMITH STREET
EAST FARMINGDALE, N.Y

P.W. GROSSER CONSULTING
ENGINEER & HYDROGEOLOGIST, P.C.
630 Johnson Ave. Suite 7
Bohemia, N.Y. 11716-2618

Project: NIN9503	Designed By: RW	Figure No: 4
CAD Operator: TC	Approved By: PWG	Date: 01-04-05

P.W. GROSSER
CONSULTING, INC.

January 6, 2005

P.W. GROSSER
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Mr. Steve Scharf
Bureau of Hazardous Site Control
NYS Department of Environmental Conservation
625 Broadway
Albany, NY 12233

Re: Operation, Maintenance, and Monitoring Program
Site No. 1-52-147

Dear Mr. Scharf:

Enclosed is the a revised draft copy of the proposed Operation, Maintenance, and Monitoring (OM&M) Program for the Minmilt Realty Site located at 540 Smith Street, Farmingdale, NY for your review. The OM&M procedures specified in attached OM&M plan is a modified version of the existing approved *Operation and Maintenance Program for the Interim Remedial Measure at Minmilt Realty, October 1996, Revised March 1997.* This attached OM&M plan has been modified to address current site conditions and to address in requirement contained in the Record of Decision (ROD) as well as NYSDEC comments on the first draft of the OM&M plan. This version of the plan incorporates revisions requested in your October 8, 2004 letter.

Routine monitoring will continue following the March 1997 OM&M plan until the attached plan is approved. Should you have any questions or require additional information, please do not hesitate to call this office.

Very truly yours,
PWGC

Bryan A. Devaux
Project Hydrogeologist

BAD:bad
cc w/encl.:
R. Cole, Minmilt
C. Hoffman
S. Robbins, SCDHS

Executive Summary

PWGC has a prepared a revised version of the Operation, Maintenance, and Monitoring (OM&M) Program for the Minmilt Realty Site located at 540 Smith Street, Farmingdale, NY. This revised version of the OM&M plan has been modified to more effectively and economically address the current site conditions. A summary of the significant changes to the existing OM&M plan are as follows:

- PWGC proposes to remove the Granulated Activated Carbon (GAC) Units from the air stripper tower air effluent. Groundwater contaminant levels from the recovery wells has been sufficiently low enough that GAC treatment of the vapor is no longer required. Removal of the units will eliminate the carbon change out from the yearly maintenance costs and lower the monthly electric usage since the duct heater will no longer be required. This following the failure of the GAC units in 2003, this change has been adopted with approval from the NYSDEC.
- PWGC proposes to remove Semi-Volatile Organic Compound (SVOC) sampling from the monthly system sampling. The two SVOCs compounds Flurorene and Phenanthrene have not been detected above 5 ppb since 1999. The groundwater standard for these two compounds is 50ppb. Removal of SVOC analysis will result in a lower monthly system sampling cost. With the permission of the NYSDEC, SVOC sampling is temporarily suspended, pending final approval.
- PWGC proposes to reduce the number of wells sampled during the quarterly sampling events. PWGC plans on reducing groundwater samples to the wells located in the centerline of the remaining plume. This will reduce the number of

wells sampled during the quarterly sampling event from 23 to 13 wells. PWGC will sample all 23 wells on a annual basis.

- PWGC plans on streamlining the quarterly report. The essential sections that apply to the quarterly status of the remedial system will remain. The annual report will include sections such as the site history, site description, remedial system construction etc. so that readers unfamiliar with the site may refer to the annual report.

Registry Update: Minmilt Realty Site, NYSDEC Site No. 1-52-147

This site is a metal forming facility consisting of a one-story industrial building on a 2.28 acre parcel. Industrial activities at this site included the use of a vapor degreaser that used tetrachloroethylene (PCE). The spent degreasing solvent was disposed into a leaching pool on-site. After an initial investigation, under an order with the Suffolk County Department of Health Services (SCDHS), an order on consent (CO) was signed on November 7, 1994 between the NYSDEC and the current owner to conduct an RI/FS and an IRM. The RI found that soils on the east side of the building were highly contaminated with PCE at levels up to 820 ppm, and groundwater contained PCE at levels up to 140,000 ppb. An Interim Remedial Measure (IRM) consisting of soil vapor extraction (SVE) and groundwater pump and treat went on-line in February 1997 and continue to operate. An investigation of the off-site groundwater plume commenced in December 1998. The groundwater component is containing the plume. The off-site RI/FS was finalized and a ROD calling for the continued operation of the SVE system to address the soil contamination and the extraction and treatment of the groundwater to address the groundwater contamination was signed on March 3, 2002. Operation, maintenance and monitoring continues and soils testing and shallow monitoring wells indicated that soils have, for the most part, been remediated and shallow groundwater has been restored to non-detect or below groundwater standards. The deeper groundwater being contained by the groundwater extraction and treatment system continues under operation, maintenance and monitoring. To date, more than 5,200 pounds of PCE has been removed from the soils and 24,000 pounds from the groundwater. The SVE system, with influence beneath the Minmilt Realty building, continues to run to ensure that soil vapor intrusion is not an issue. As part of the closure procedure, Minmilt will submit a soil gas/ indoor air survey work plan for DEC/DOH review to reconfirm that vapor intrusion is not an issue.

The onsite shallow groundwater wells are now all either below groundwater standards or non-detect for site related contamination. Deeper groundwater at the downgradient recovery wells is still contaminated and the groundwater extraction and treatment system will continue to operate accordingly. Soils beneath the former source area have been successfully remediated and indoor air testing during the RI was non-detect for site related volatile organic compounds. In addition, Minmilt has made part of the Operation, maintenance and monitoring plan the continued operation of the Soil Vapor Extraction system as long as the groundwater recovery system is operating to ensure that soil vapor intrusion will not be an issue. The selected remedy is operating as designed and as specified in the Record of Decision (ROD). The soil vapor extraction (SVE) has removed the source of soil contamination and the groundwater extraction and treatment system has restored the shallow groundwater to non-detect or below groundwater standard conditions. The SVE system, with influence beneath the building will continue to operate and soil vapor intrusion is likely not an issue. This will be confirmed by a NYSDEC/NYSDOH approved work plan prior to site delisting. Currently, the site will be reclassified to 4, for operation, maintenance and monitoring. Institutional control(s) are contingent on the ability of the site remediation to restore the site soils and groundwater beneath the site to pre-disposal and/or below regulatory and guidance criteria conditions. Based on the success to date of the site remediation, ICs will not likely be necessary for this site. A final determination will be made at the time a petition is made to de-list the Minmilt realty site from the registry of Inactive Hazardous Waste Disposal sites.

OPERATION, MAINTENANCE AND

MONITORING PROGRAM

FOR THE APPROVED REMEDIAL MEASURE

(NYSDEC ROD 03/21/2002)

AT

MINMILT REALTY

EAST FARMINGDALE, NEW YORK

NYSDEC SITE NO. 1-52-147

Prepared For: ***Minmilt Realty Corporation***

Prepared By: ***P.W. Grosser Consulting Inc.***

January 2005

J:\Projects M-R\Min - Minmilt Realty\9603 - Remediation System\REPORTS\omm\OM&Mplan2002.WPD

OPERATION, MAINTENANCE & MONITORING PLAN
FOR THE APPROVED REMEDIAL MEASURE
(NYSDEC ROD 03/21/2002)
AT
MINMILT REALTY
EAST FARMINGDALE, NEW YORK

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1.0 INTRODUCTION

This report was prepared by P.W. Grosser Consulting Inc.(PWGC) on behalf of Minmilt Realty Corp. The report presents the proposed Operation, Maintenance & Monitoring (OM&M) procedures to be conducted during the operation of the approved remedial measure as documented in the New York State Department of Environmental Conservation (NYSDEC) Record of Decision (ROD), March 21, 2002. Alternative 4 - Continued Source Area Remediation and Monitoring is the NYSDEC selected remedy for the remaining soil and groundwater contamination at the Minmilt Realty site (NYSDEC Site No. 1-52-147).

PWGC has performed on-going operation, maintenance & monitoring of the approved Interim Remedial Measure (IRM) since February 1997. PWGC has followed the OM&M procedures detailed in the NYSDEC approved document *Operation and Maintenance Program for the Interim Remedial Measure at Minmilt Realty, October 1996, Revised March 1997.* This document essentially updates the above referenced document. Since the chosen remedial measure is to continue operating the existing IRM and monitoring the progress of site remediation, much of the procedures remain the same. However, completed tasks, such as start-up monitoring have been deleted and relevant new information added.

The O&M procedures described herein meet the following objectives:

- optimize the efficiency of systems performance;
- monitor compliance with applicable discharge permits; and
- monitor the effectiveness and progress of site remediation.

The report addresses routine OM&M procedures and schedules for both the soil vapor extraction (SVE) and groundwater remediation systems. Individual equipment maintenance specifications, routine and critical maintenance activities, equipment replacement schedules, and troubleshooting operational problems were included in the *Operation and Maintenance Manual* provided by Miller Environmental Group, Inc. previously submitted with the March 1997 O&M Program as Attachment A. The only periodic maintenance for the remedial system is lubrication of the air stripper blower. Maintenance for this is

included in the O&M manual provided by Miller Environmental Group, Inc.

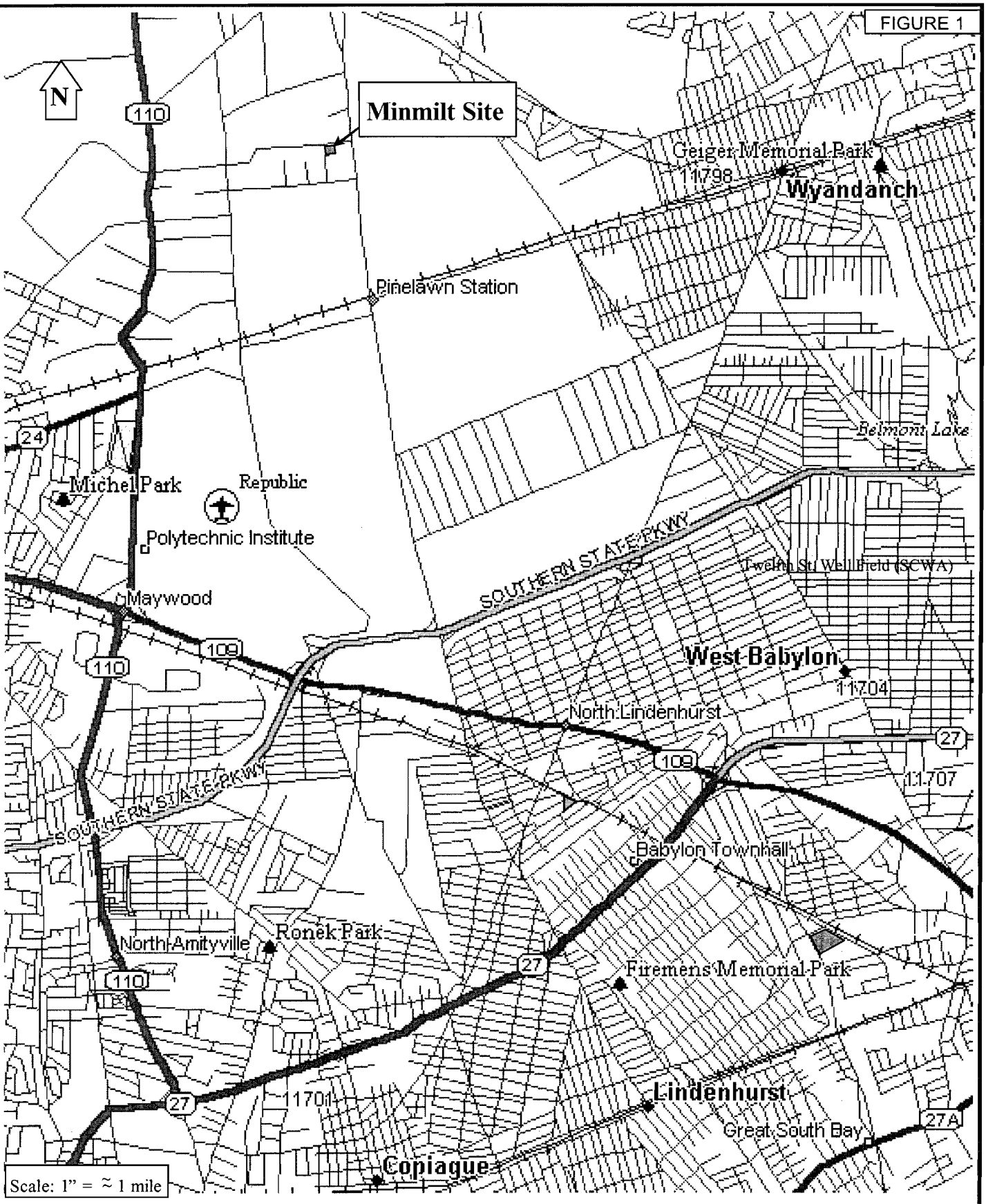
1.1 Site Description

The Minmilt Realty site is located at 540 Smith Street, East Farmingdale, New York. The property is owned by Minmilt Realty Corp. The building was formerly leased by Hygrade Metal Moulding until June 30, 1997, when they moved their manufacturing facilities off of Long Island. The building remained vacant until November, 1997 when it was leased by J.D'Addario & Company, Inc. The site lies on the south side of Smith Street, between New Highway and Wellwood Avenue. The location of the Hygrade site is illustrated in **Figure 1**. The site encompasses 2.28 acres with a single story building of 41,103.6 square feet.

The Minmilt Realty site is bordered on the east by Great Neck Saw, a manufacturer of metal tape measures and on the south by a property formerly occupied by Cantor Brothers, a chemical re-packing and handling facility which is on the NYSDEC List of Inactive Hazardous Waste Disposal Sites (Site No. 1-52-021). A remedial investigation was recently performed at the Cantor Brothers site and a remedial measure consisting of several SVE wells was initiated in June 1998. As of June 14, 2001, the Cantor Brothers SVE system has been shut down, however, the NYSDEC indicated that additional remediation was warranted at the site. Prior to the construction of the building expansion, the NYSDEC oversaw the removal of impacted soils from the site. In addition, light non-aqueous phase product was detected in Shorewood Packaging Well SP-6, located immediately down-gradient from the Cantor Brothers Site during PWGC's First Quarter 2002, sampling event. These results have been submitted to the NYSDEC under separate cover. Bordering the site to the west is a building occupied by Liedel Corp. which fronts a Town of Babylon recharge basin.

Further east is Pinelawn National Cemetery and further south is Pinelawn Memorial Park Cemetery. Some of the property north and west of the site is still used for farming. The site's potable water is provided by the East Farmingdale Water District.

FIGURE 1



SITE VICINITY MAP

540 Smith Street

East Farmingdale, N.Y.

1.2 Site History

The Minmilt Realty building was constructed in 1965 for Hygrade Metal Moulding. Prior to 1965, the property was vacant and used for agricultural purposes. Hygrade manufactured metal mouldings from strip metals used in the construction of windows and other finished products. Prior to 1983, Hygrade used a vapor degreaser to clean metal parts with tetrachloroethylene (PCE). This procedure was terminated in 1983.

The SCDHS issued Minmilt Realty an Order on Consent (No. IW-91-0021) in January, 1992. The Consent Order alleged that Minmilt Realty caused or permitted the discharge of toxic or hazardous material to an on-site leaching pool subsequently violating Section 760-1205 of Article 12 of the Suffolk County Sanitary Code. The referenced leaching pool is reported to have received periodic discharges from the vapor degreaser which contained PCE.

In response to the SCDHS Consent Order, a soil and groundwater investigation was conducted by PWGC under subcontract to Middleton, Kontokosta Associates (MKA). The objective of the investigation was to identify on-site contamination and associated source areas resulting from the alleged discharges. The results of the investigation are contained in the *Investigation Report* prepared by PWGC.

The soil and groundwater investigation identified significant soil contamination present in the subsurface on the east side of the building. The contamination is primarily PCE and was detected at concentrations high enough to classify some of the soil material as hazardous. PCE concentrations were found to increase with depth towards the water table. Preliminary calculations estimate approximately 5,500 cubic yards of soil have been impacted.

In addition, PCE was detected in the groundwater beneath the site in excess of acceptable NYSDEC standards. Contaminated soils are suspected to be the primary source of PCE in the groundwater. The PCE plume was determined to extend downgradient to at least the southern property line of Hygrade and vertically to at least 80 feet below grade (40 feet below the water table).

The soil and groundwater investigation also determined that background and upgradient groundwater quality in the vicinity of the Minmilt Realty site was also degraded indicating the presence of other upgradient sources of contamination.

In order to expedite the cleanup of the Minmilt Realty site and minimize further degradation of groundwater quality, an interim remedial measure (IRM) was proposed. The IRM consisted of a soil vapor extraction and groundwater pump and treat combination system to begin removal of the gross contamination. Details of the proposed IRM are contained in PWGC's report entitled *Interim Remedial Measure to be Conducted at the Hygrade Metal Moulding Facility East Farmingdale, New York - An Evaluation of Alternatives and Design, January 1994, revised December 1995 and April 1996 (IRM Report).*

Prior to the approval of the IRM, a remedial investigation was undertaken at the Minmilt Realty site to address the potential existence of other on-site sources; the potential migration of volatile organic vapors into the Minmilt Realty building and adjacent structures; the off-site migration of the dissolved groundwater plume; and the vertical depth of the dissolved groundwater plume. Complete results of this investigation are contained in the *Remedial Investigation Report For Hygrade Metal Moulding Manufacturing Corp., East Farmingdale, New York, October 1995, revised February 1996 (Remedial Investigation Report).*

There were no additional sources of PCE identified by the remedial investigation at the Minmilt Realty site. The vertical extent of the groundwater plume was determined to exist in the Magothy Aquifer to a depth of approximately 185 feet where it is contained by a clay layer. In addition, on-site monitoring well MW-3 was found to contain a mixture of fuel oil and PCE in a non-aqueous state. The findings of the remedial investigation resulted in the approval of the most recent revised (April 1996) *IRM Report* and the subsequent construction of the proposed treatment system which this O&M program addresses.

Construction of the IRM was initiated in August, 1996 and completed in February 1997. The *Construction Completion Report For The Interim Measure At Minmilt Remedial Site, East*

Farmingdale, New York (Construction Completion Report) was submitted on July 24, 1997 under separate cover. Construction services were provided by Miller Environmental Group Inc. (MEG), Calverton, N.Y. with construction oversight performed by PWGC.

The NYSDEC, in a January 13, 1998 correspondence, detailed a number of tasks to be completed under a focused off-site (RI/FS). PWGC submitted an Off-Site RI Work Plan in September 1998 to the NYSDEC for review and comment. The Off-Site RI Work Plan specified that the additional work would be performed in accordance with the existing Health and Safety Plan (HASP) and Quality Assurance Project Plan (QAPP) developed for the on-site RI/FS, and the Operation and Maintenance Program (O&M Program) associated with the (IRM) system. Approval for the work plan was received from the NYSDEC on December 11, 1998 . After completing the work detailed in this work plan and identifying specific gaps in the data set, an addendum outlining additional field work was prepared by PWGC (RI Supplemental Data Collection Work Plan) and submitted to the NYSDEC in July 2000. The work described in the addendum was completed in September 2000. The Final Off-site RI/FS Report was completed and submitted to the NYSDEC in October 2001. The report summarized the on-site remedial investigation, detailed the results of the off-site remedial investigation, summarized exposure pathways for existing contamination, performed contaminant fate and transport modeling, and provided evaluations of six different remedial alternatives with regard to the findings of the investigation.

Following submission of the Off-site RI/FS Report, The NYSDEC issued their Proposed Remedial Action Plan for the Minmilt Realty Site in February, 2002. Following the appropriate public meeting and comment period, the NYSDEC signed the Record of Decision (ROD) for the site in March 2002. This OM&M plan represents an element of the selected remedy outlined in the ROD.

2.0 IRM REMEDIAL SYSTEM DESCRIPTION

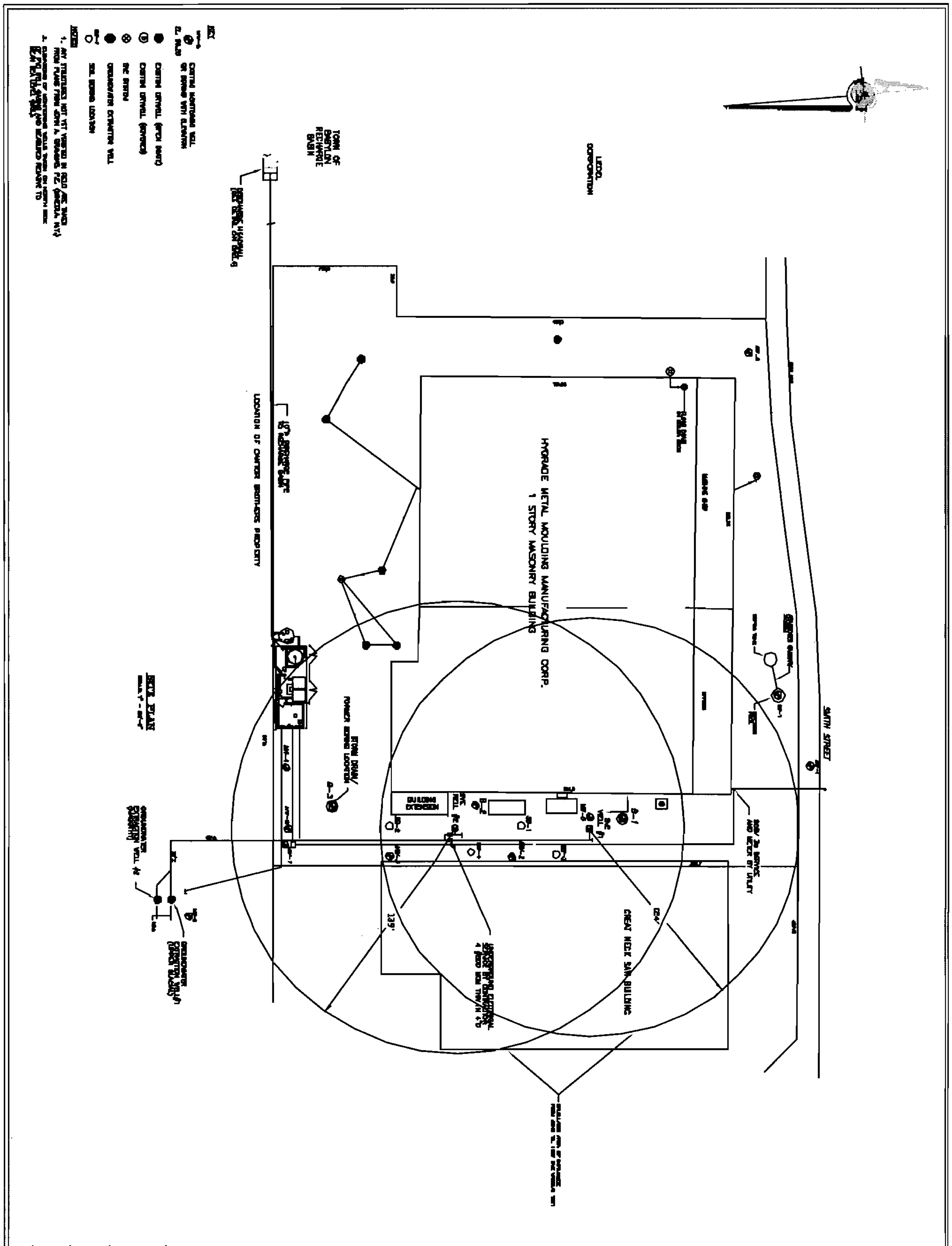
The existing IRM consists of an SVE system and a groundwater pump and treat air stripper system to remove contaminants from the soil and groundwater, respectively. This section provides a brief overview of each system for the purpose of describing the OM&M procedures. The IRM is described in greater detail in the *IRM Report.*

2.1 Soil Vapor Extraction (SVE) Remedial System

The SVE treatment system consists of two vapor extraction wells set in the source area located on the east side of the building (**Figure 2**). The contaminated air stream is extracted from the source area and passed through an air/water separator to remove moisture with a vacuum blower. The discharge from the SVE blower is routed directly to the atmosphere. A process flow diagram detailing the SVE treatment system is depicted in **Figure 3**.

2.2 Groundwater Remedial System

The groundwater remedial system includes two recovery wells. The shallow recovery well is screened in the Upper Glacial Aquifer and the deep recovery well is screened in the Magothy Aquifer. Groundwater extracted from these recovery wells is pumped to the top of a packed column air stripper tower (influent), allowing it to flow downward through the packing media while air is forced upward through the column. Off gas from the air stripper passing through a duct heater. The duct heater reduces the relative humidity of the air stream to less than 50% before it enters the first of two 3,000-pound vapor phase GAC vessels (in series) that remove contaminants prior to discharge to the atmosphere. As of April 17, 2002, with the approval of the NYSDEC, the carbon has been removed from the vessels and the duct heater is no longer operated. The treated water (effluent) is discharge to the Town of Babylon recharge basin located adjacent to the site. A process flow diagram detailing the flow path of the groundwater recovery treatment system is depicted in **Figure 3**.

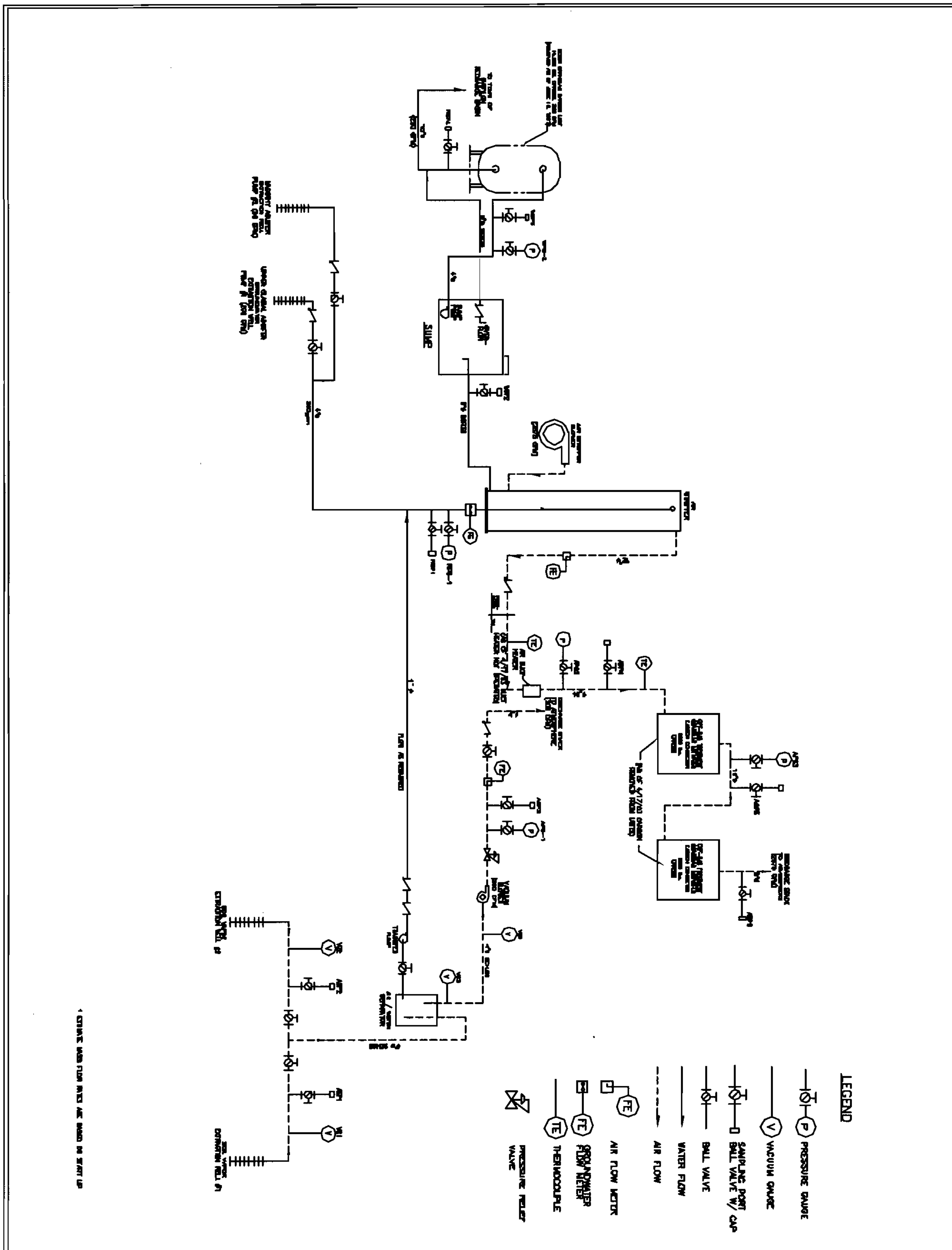


M.W. GROSSER CONSULTING ENGINEER & HYDROGEOLOGIST, P.C.
630 Johnson Ave., Suite 7
Bohemia, N.Y. 11716-2618

Site Plan / Source Area

540 Smith Street
East Farmingdale, N.Y.

Project: MW9603	Figure No. 2
BAD	
PWG	
KF	Date: 12/16/02



J/ALL/MIN/MN03/REPORTS/OMM/FIGURES/FIG3

F.W. GROSSER CONSULTING, INC.

Process Flow Diagram

540 Smith Street
East Farmingdale, N.Y.

MN9603
RAD
PWC
KF/TC

3

05/05/03

2.3 Remedial System Modifications

Since start-up, the system has been modified with approval from the NYSDEC. Originally, two vapor phase granular activated carbon (GAC) vessels in series were installed to capture contaminated air streams resulting from the air stripper off gases and the SVE system. Due to SVE effluents being consistently below NYSDEC discharge limits, the SVE system effluent was routed directly to the atmosphere on April 16,1999.

PWGC evaluated the air stripper off-gas in January 2001 with respect to the NYSDEC Air Guide I document. The evaluation was based on using an average total VOC influent concentration of 3079 ug/l and a combined flow rate of 180 gallons per minute. The calculations yielded AGC and SGC concentrations of 2.98 ug/m^3 and 193.96 ug/m^3, respectively. The estimated concentrations at the time were below the SGC permissible PCE concentration of 1,000 ug/m^3, but exceeded the AGC permissible PCE concentration of 1.0 ug/m^3. Since total VOCs for the groundwater remedial system were consistently below 4,500 µg/l since September 2000, and the air stripper off-gas meets the NYSDEC air quality guidelines, PWGC received approval from the NYSDEC to cease carbon treatment of tower off-gas. On April 17, 2003, the vapor phase carbon was removed by General Carbon. The system is currently running with the vapor phase carbon units empty

The liquid GAC vessel originally installed as a polishing unit for the air stripper tower water effluent prior to discharge to the Town of Babylon recharge basin was taken off line on June 15, 1997. This change was made following fourteen consecutive sample results indicating that the tower effluent quality was within the designated NYSDEC discharge limits. With the removal of the liquid GAC vessels, the system was modified to gravity drain directly to the recharge basin, by passing the sump, on January 22, 2003.

Documentation regarding the requests to modify the system and the associated approvals from the NYSDEC can be found in the documentation record for the project.

3.0 IRM REMEDIAL SYSTEM OPERATION

The IRM treatment system was designed for manual start-up and shut-down and for unattended operation once it is running. During normal operation, the equipment runs continuously except for the SVE system transfer pump and sump pump (prior to January 22, 2003) which will start and stop based on the liquid level in the moisture separator and sump, respectively.

The controls for the system include alarms for motor overloads and high level in the moisture separator and sump. Various interlocks cause some or all equipment to shut down due to an alarm condition occurring. If an alarm condition occurs, a dial-up telemetering system calls the appropriate personnel and gives a prerecorded alarm message.

Two methods of electrical surge protection were incorporated into the Minmilt IRM treatment system. A lightening rod was installed to ground the fence that encompasses the remedial system. The 3/4-inch diameter copper lightening rod was attached to the far west gate post and extends ten feet below ground. The electrical system was also properly grounded with a 10-foot long, 3/4-inch diameter copper ground rod for surge protection. This ground rod is located to the south of the shed where the electrical service enters the shed.

The following subsections describe the detailed procedures for the start-up and shut down of the IRM treatment system.

3.1 System Start-up Sequence

The start-up sequence listed below should be carefully followed. It must be understood that certain pieces of equipment will not start up unless others are already operating (interlocks). Likewise, if a key piece of equipment should shut down, it could cause other pieces of equipment to shut down. Such "key" pieces of equipment include the duct heater control panel, air stripper blower, air flow switch, and sump pump (prior to January 22, 2003). Please read through each step completely before touching any switches or buttons. If at any time during the start-up sequence a RED light illuminates, stop, analyze the alarm

condition, solve the problem, and document it. Reference should be made to the diagram of the primary control panel presented as **Figure 4.**

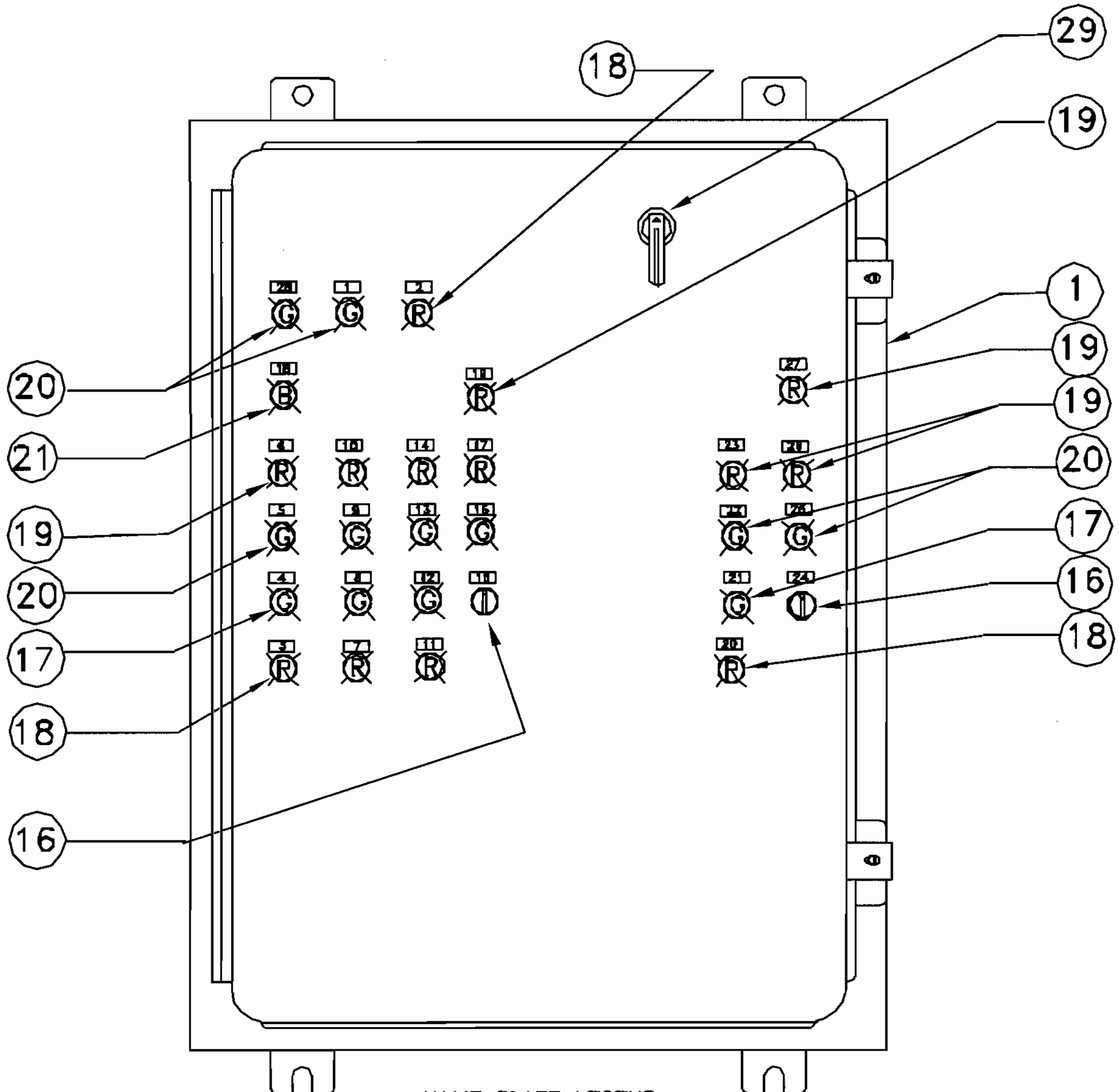
Groundwater Remedial System

1. **Check** the electrical circuit breaker distribution panel to make sure that the **main power is on**. It is labeled "Main Power." This switch should always be in the on position. **Do not turn it off**. The electrical circuit breaker distribution panel is located on the southern wall of the shed on the left side.

2. **Check** the electrical circuit breaker distribution panel to make sure that the **system control panel and duct heater circuit breakers are on**.

3. Turn the **power disconnect switch on the system control panel to the on position**. The system control panel is located on the east wall of the shed. The disconnect switch is located at the top right corner of the control panel. It should be turned clockwise from the 9:00 position to the 12:00 position. After about 10 seconds, the only light that should be lit on the system control panel is the green "power" light. **If any RED lights illuminate stop immediately** - do not continue with the start-up sequence until the cause for the alarm condition is understood, corrected, and documented.

4. Turn the **power disconnect switch on the duct heater control panel to the on position**. The duct heater control panel is located on the south side of the shed, to the right of the electrical circuit breaker distribution panel. The power handle is a red and yellow circular switch located at the top right corner of the duct heater control panel. This switch should be turned clockwise one position. Once this is on, an orange "power" light on the duct heater control panel should illuminate. A green "duct heater on" light at the top left corner of the system control panel should illuminate. This light may take two minutes to illuminate because the two thermal couples that control the duct heater



NAME PLATE LEGEND

1. POWER ON (PILOT LIGHT GRN)
2. ALARM RESET(P.B.FLASH HEAD RED)
3. AS BLOWER OFF (P.B. FLASH HEAD RED)
4. AS BLOWER ON (P.B. FLASH HEAD GRN.)
5. AS BLOWER ON (PILOT LIGHT GRN.)
6. AS BLOWER O.L. ALARM (PILOT LIGHT GREEN)
7. WELL PUMP 1 OFF (P.B. FLASH HEAD RED)
8. WELL PUMP 1 ON (P.B. FLASH HEAD GRN.)
9. WELL PUMP 1 ON (PILOT LIGHT GRN.)
10. WELL PUMP 1 O.L. ALARM (PILOT LIGHT RED)
11. WELL PUMP 2 OFF (P.B. FLASH HEAD GRN.)
12. WELL PUMP 2 ON (P.B. FLASH HEAD GRN.)
13. WELL PUMP 2 ON (PILOT LIGHT GRN.)
14. WELL PUMP 2 O.L. ALARM (PILOT LIGHT RED)
15. SUMP PUMP H.O.A. (3 POS. SEL. SW.)
16. SUMP PUMP ON (PILOT LIGHT GRN.)
17. SUMP PUMP O.L. ALARM (PILOT LIGHT RED)
18. AIR FLOW (PILOT LIGHT BLUE)
19. SUMP HIGH LVL. ALARM (PILOT LIGHT RED)
20. SVE BLOWER OFF (P.B. FLASH HEAD RED)
21. SVE BLOWER HEAD ON (P.B. FLASH HEAD GRN.)
22. SVE BLOWER ON (PILOT LIGHT GRN.)
23. SVE BLOWER O.L. (ALARM (PILOT LIGHT RED)
24. SVE XFER PUMP H.O.A. (3 POS. SEL. SW.)
25. SVE XFER PUMP ON (PILOT LIGHT GRN.)
26. SVE XFER PUMP O.L. ALARM (PILOT LIGHT RED)
27. MOISTURE SEPERATOR HIGH LVL. ALARM (PILOT LIGHT RED)
28. DUCT HEATER ON (PILOT LIGHT GRN.)
29. CONTROL PANEL POWER SHUT OFF

P.W. GROSSER CONSULTING, INC.

SYSTEM CONTROL PANEL

Project: 9603	Figure No. 4
RAD	
PWG	
KF	Date: 07-18-02

must heat up first. **If the green duct heater light on the system control panel does not illuminate, do not continue until the problem is resolved and documented.**

5. **Turn on the air stripper blower**. When the green start push-button is pressed, a green light should illuminate above the push-button. The push-button must be held in until the blue "air flow" light (the only blue light) illuminates. This light indicates that there is air flow to the stripper and should light up within a few seconds of starting the blower. **If this blue light does not illuminate, do not continue until the problem is resolved and documented.**

6. Turn on the **Upper Glacial** well pump which is **well pump #1**. When this push-button is pressed, a green light should illuminate above it. **If this light does not illuminate, do not continue until the problem is resolved and do not turn on the Magothy pump.** The Magothy well pump can not be run without the Upper Glacial well pump operating, since the draw down in the Magothy Aquifer will impact the Upper Glacial aquifer unless the Upper Glacial well pump is on.

7. Once the Upper Glacial well pump is on, turn on the **Magothy** well pump which is **well pump #2**. A green light should illuminate above the push-button. If this light does not illuminate, you may continue with the start-up sequence; however, this problem should be resolved and documented.

— **Now the entire groundwater remedial system should be operating.** —

SVE Remedial System

8. Make sure the **SVE transfer pump** HOA switch is in the **auto position**. When the transfer pump is in the auto position, it will turn on automatically when the water fills to a certain level within the air/water separator. The switch may be placed in the "hand" position when it is known that the water level inside the air/water separator is high. The transfer pump HOA switch should normally be in the auto position.

9. **Turn on the SVE blower**. A green light above the push-button should illuminate, and you should be able to hear the blower turn on.

10. **Turn on the telephone auto dialer system.**

    — **Now the entire SVE remedial system should be operating.** —

11. Check the u-meter readings within the shed to ensure that the blowers are producing the correct amount of air flow. The SVE blower u-meter should read between 165 and 210 cfm. The air stripper blower u-meter should read between 2100 - 2700 cfm. Check the pressure and vacuum gauges both inside and outside the shed. Document the readings and compare them to normal operating ranges.

3.2 System Shut-down Sequence

When both the groundwater and SVE systems are operating, the SVE system must be shut down before shutting down the air stripper system. Please read through the following steps before touching switches or push-buttons. Reference should be made to **Figure 4** of the primary control panel if you have questions about which buttons to press. If the system is being shut down for anything other than short term maintenance, the NYSDEC should be notified.

SVE Remedial System

1. **Turn off the SVE blower**. When this push-button is pressed, the green "on" light above the push-button should turn off. Make sure this light is off. You should hear the SVE blower, which is in the same room, turn off.

2. The transfer pump HOA switch should be in the auto position during SVE system operation. **Check** to see if the transfer pump is running. If it is running, you should be able to hear it. (It is the 1.5 hp pump located on the shed floor under the primary control panel.) If it is running, do not turn it to the off position. The pump should turn off automatically when it has pumped almost all

of the water out of the air/water separator. **Once the pump stops running, turn the transfer pump switch to the off position.**

Groundwater Treatment System

3. **Turn off the Magothy well pump #2.** When the red stop push-button is pressed, the green light located above the push-button should turn off. Make sure that this light turns off.

4. **Turn off the Upper Glacial well pump #1.** When the red stop push-button is pressed, the green light located above the push-button should turn off. Make sure that this light turns off.

5. **Shut down the air stripper blower**. When the red stop push-button is pressed, the green light above it should turn off. It may take a few seconds, but the blue air flow light should also turn off.

6. **Turn off power at the duct heater control panel**. The duct heater control panel is located on the south shed wall to the right of the electrical distribution panel. Turn the power dial switch on the duct heater control panel to the off position, which is a counter clockwise turn. The orange light on the duct heater control panel should turn off. The green "duct heater" light on the system control panel should also turn off.

7. **Turn off power at the system control panel** by turning the disconnect lever located at the top right corner of the panel counter clockwise 90 degrees.

8. **Turn off the power to the system control panel and the duct heater control panel from the electrical circuit breaker distribution panel** if the system is to be shut down for an extended period of time or the panels need to be opened.

4.0 ROUTINE MONITORING AND MAINTENANCE OF GROUNDWATER REMEDIAL SYSTEM

Routine monitoring of the groundwater remedial system includes monthly influent and effluent sampling, water level monitoring, quarterly groundwater sampling, and maintenance/corrective actions. Remediation progress is measured through volatile organic compound (VOC) mass removal calculations. To estimate mass removal of contaminants from each aquifer, individual sampling of the extraction wells is performed. Individual sampling was initiated during the second/third quarter 1998 and is performed once per quarter.

4.1 Influent/Effluent Sampling

Routine system samples include a combined or individual influent sample from WSP 1 and a combined system effluent sample taken at the end of pipe, prior to discharge to the recharge basin.

Routine influent and effluent samples are collected by placing laboratory supplied glassware beneath WSP 1 and at the end of pipe. When the individual influent samples are collected, one extraction well is shut down, then sufficient time allotted to allow the flow rate to stabilize prior to collecting the sample.

Monthly samples have been analyzed for VOCs, semi-VOCs (SVOC) and pH as required by the NYSDEC and designated with a monthly monitoring frequency in their Effluent Limitations and Monitoring Requirements for the site (see **Table 1**). The VOC's and SVOC's have been analyzed by EPA Methods 8240 and 8270, respectively. Additionally, total iron of the system influent and system effluent is analyzed monthly to evaluate potential iron fouling problems of the air stripper packing. Routine sampling results are reported with results only deliverables.

A review of the influent data back through 1999 shows that the two SVOC compounds (Fluorene and Phenanthrene) that the NYDEC requires to be analyzed have not been detected above 5ppb. A level of 5ppb is well below the groundwater standard of 50ppb for each of the compounds. Since these compounds do not appear to pose a significant hazard, PWGC feels that further sampling for SVOCs should not be required. PWGC prepared a letter to the NYSDEC formally requesting permission to stop

TABLE 1
EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS
HYGRADE METAL MOULDING
DHWR SITE NO.: 1-52-147

Outfall Number & Effluent Parameter	Discharge Limitations		Units	Minimum Monitoring Requirements	
	Daily Avg.	Daily Max.		Measurement Frequency	Sample Type
Outfall 001 Treated Groundwater					
Flow	Monitor	Monitor	gpd	Continuous	Recorder
pH (Range)	5.5 - 8.5		SU	Monthly	Grab
Benzene	Monitor	0.7	ug/l	Monthly	Grab
Toluene	Monitor	5	ug/l	Monthly	Grab
Ethylbenzene	Monitor	5	ug/l	Monthly	Grab
1,2-Xylene	Monitor	5	ug/l	Monthly	Grab
1,3 and 1,4 Xylenes	Monitor	5	ug/l	Monthly	Grab
1,1-Dichloroethene	Monitor	5	ug/l	Monthly	Grab
1,1-Dichloroethane	Monitor	5	ug/l	Monthly	Grab
1,2-cis-Dichloroethene	Monitor	5	ug/l	Monthly	Grab
1,2-trans-Dichloroethene	Monitor	5	ug/l	Monthly	Grab
Chloroform	Monitor	7	ug/l	Monthly	Grab
1,1,1-Trichloroethane	Monitor	5	ug/l	Monthly	Grab
Trichloroethene	Monitor	5	ug/l	Monthly	Grab
Tetrachloroethene	Monitor	5	ug/l	Monthly	Grab
1,2,4-Trimethylbenzene	Monitor	5	ug/l	Monthly	Grab
Methylene Chloride	Monitor	5	ug/l	Monthly	Grab
1,3-trans-Dichloropropene	Monitor	5	ug/l	Monthly	Grab
Chloromethane	Monitor	5	ug/l	Monthly	Grab
Vinyl Chloride	Monitor	2	ug/l	Monthly	Grab
Trichlorofluoromethane	Monitor	5	ug/l	Monthly	Grab
Dibromochloromethane	Monitor	5	ug/l	Monthly	Grab
Bromoform	Monitor	5	ug/l	Monthly	Grab
1,1,2,2-Tetrachloroethane	Monitor	5	ug/l	Monthly	Grab
1,3-Dichlorobenzene	Monitor	5	ug/l	Monthly	Grab
1,2 and 1,4-Dichlorobenzene	Monitor	4.7	ug/l	Monthly	Grab
Chlorobenzene	Monitor	5	ug/l	Monthly	Grab
1,1,2-Trichloroethane	Monitor	5	ug/l	Monthly	Grab

sampling for SVOCs in January 2002. The NYSDEC is in the process of reviewing PWGCs request. Since SVOCs have been non-detect, the NYSDEC is allowing PWGC to temporarily suspend SVOC sampling until a permanent decision by the NYSDEC Division of Water is made.

4.2 Water Level Monitoring

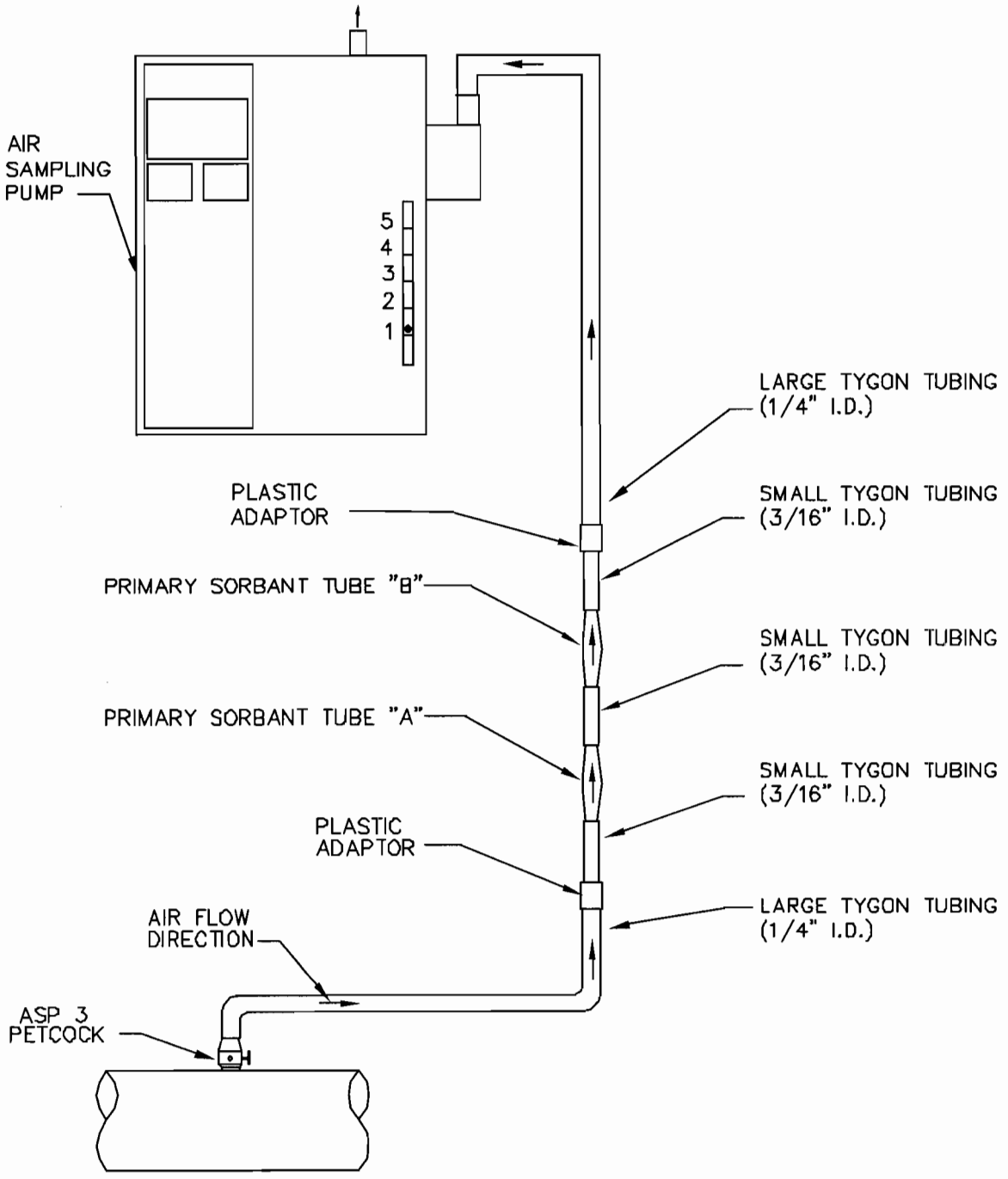
A synoptic reading of water levels is collected monthly from each of the nine (9) Minmilt Realty related monitoring wells, four (4) Cantor Brothers monitoring wells, the six (6) Shorewood Packaging monitoring wells and the SCDHS well using an electronic water level indicator. This information is used to continue to track fluctuations in groundwater elevations, its potential impact on contaminant concentrations, and to generate a quarterly groundwater elevation contour map to evaluate the effects of the recovery wells on local groundwater flow patterns. The quarterly groundwater elevation contour map is included in the quarterly monitoring report.

4.3 Air Quality Monitoring

Air quality from ASP 6 (**Figure 3**) is monitored monthly. A Photovac PID equipped with an 11.7 eV lamp is used to collect readings of total VOC's to determine the effluent VOC levels and are recorded on system monitoring/maintenance forms (**Appendix A**) for inclusion in quarterly reporting. PWGC will also calculate the air concentrations based upon the tower influent concentrations, the air stripper tower air flow rate, and the influent groundwater flow rate.

4.4 Groundwater Remedial System Vapor Effluent Monitoring

In addition to calculating the tower vapor effluent on a monthly basis, a quarterly tower effluent sample will be collected from ASP 5 (see **Figure 3**). The sample will be collected using a sampling train (see **Figure 5**) consisting of tygon tubing connecting laboratory supplied carbon tubes in series to the appropriate air sampling port on the up stream side, and to a laboratory calibrated air sampling pump. The air sampling pump is used to collect the sample at a regulated rate so that an accurate volume of air collected can be calculated. An air sampling log is kept depicting start and stop flow rates and elapsed sampling time for air sample volume calculations and are included in the quarterly report. PWGC anticipates, a volume of ten (10) liters of air will be collected (at one liter per minute for ten minutes) for effluent sample analyses. PWGC will adjust the sample volume based upon the contaminant levels encountered in previous sampling



N.T.S.

J:\ALL JOBS\8803\CADD\GLN\FIG5.DWG

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Project	8803
Drawn By	RAD
Approved By	FWG
Date	07-18-02
Figure No.	5

rounds so that the lowest method detection limits may be obtained.

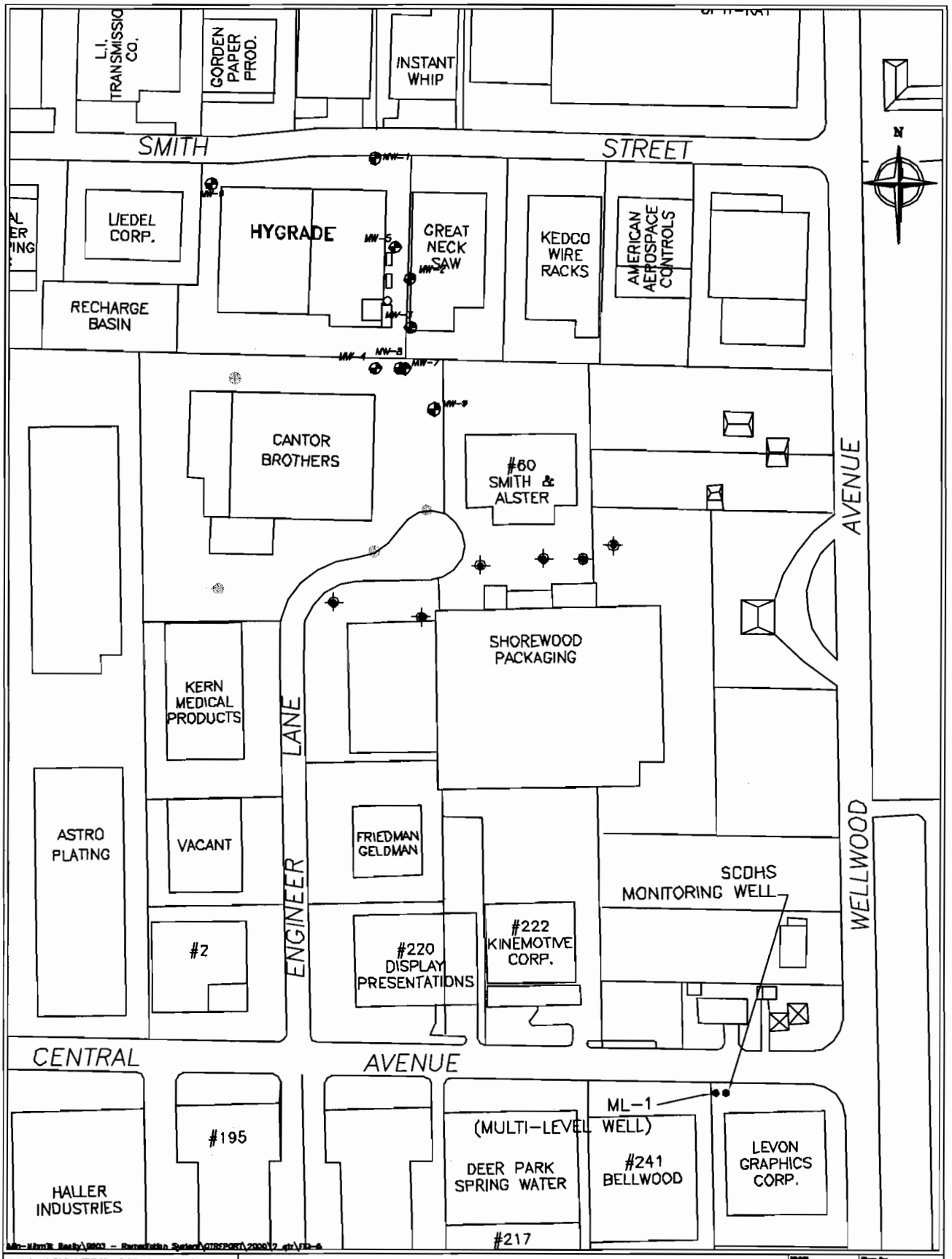
The quarterly air sample is analyzed for VOC's designated in the NYSDEC Effluent Limitations and Monitoring Requirements by EPA Method 5030 (purge and trap) followed by EPA Method 8240. The sample is reported with results only deliverables.

4.5 Quarterly Groundwater Sampling

Quarterly groundwater samples have been collected routinely from Minmilt Realty monitoring wells MW-1 through MW-9, Cantor Brothers monitoring wells GW-1 through GW-4, and Shorewood Packaging monitoring wells SP-1 through SP-6. More recently, quarterly groundwater samples have been collected from the SCDHS monitoring well located on central avenue along with various levels of a multi level well installed in the vicinity of the SCDHS well as shown in **Figure 6**. This well was installed on March 26, 2000 to further assess the water quality down-gradient of the site as part of the off-site RI/FS. The well was installed to a depth of 150' and consists of a 2" PVC centralizer pipe surrounded by ten ½" PVC wells. Each of the ½" wells were constructed with 6" of screen. The deepest well (ML-1A) is screened from 149.5'-150' below grade. Each individual well was screened to a depth 10' shallower than the previous well with well ML-1L being the shallowest interval screened at 39.5'-40' below grade.

In order to obtain more complete information with regard to the fate of the Minmilt plume, PWGC decided to incorporate the sampling of select intervals of the multi-level well into the quarterly sampling program. Historically, the greatest concentrations of contaminants has been detected at a depth of 150'. This depth coincides with a sandy clay layer with a reduced permeability and it appears that the un-captured portion of the Minmilt plume is spreading in the Magothy along the sandy clay layer. Based on these results, PWGC decided to sample the three deepest sampling intervals as part of the quarterly monitoring program (Well A, Well B, Well C).

Given the history of groundwater sampling results associated with the operation of the IRM to date, PWGC proposes to reduce the amount of wells sampled on a quarterly basis. The wells incorporated in the quarterly sampling program are located through the centerline of the Minmilt realty plume and will include



P.W. GROSSER CONSULTING
ENGINEER & HYDROGEOLOGIST, P.C.

LOCATION MAP OF SCDHS WELL

640 SMITH STREET
EAST FARMINGDALE, NY

6

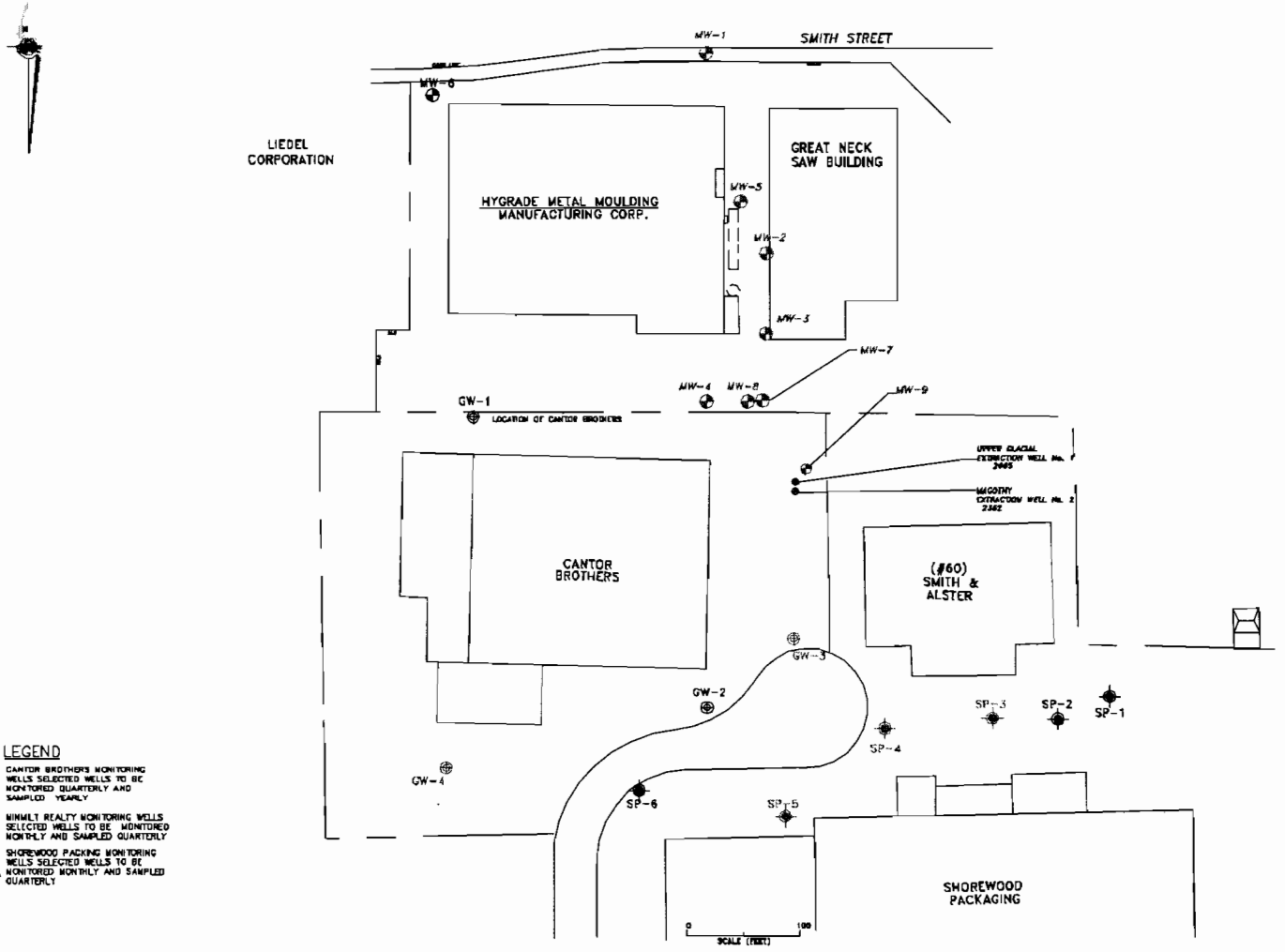
10/17/00

Minmilt Realty Wells MW-1,MW-2, MW-3, MW-4, MW-5, MW-7, MW-8, MW-9, Cantor Brothers Well GW-3, GW-4, Shorewood Packaging Wells SP-3, SP-4 and SP-5, and the three deepest multi level sample intervals ML-1A, ML-1B, and ML-1C. The location of these wells is shown on **Figure 7**. Wells MW-6, GW-1, GW-2, SP-1, SP-2, SP-6 and the SCDHS well will be sampled on a annual basis. Photos of each of the well locations is included as **Appendix B**. The wells eliminated from the quarterly sampling program are essentially located peripheral to the plume and have shown typical background concentrations. Their elimination from the program should have no impact on the interpretation of the Minmilt Realty plume and the interpretation of the continued progress of site remediation.

Groundwater samples from two and four inch monitoring wells are collected in accordance with procedures outlined in the existing *March 1994 Quality Assurance Project Plan (QAPP)* originally prepared for the Remedial Investigation and it's March, 1997 Addendum No. 1 prepared for the *O&M Program*. Procedures included setting up a designated work zone at the foot of each well using dedicated plastic sheeting, collecting a static water level from each well prior to purging, purging at least three well volumes from each well, and collection of the groundwater sample using a dedicated polyethylene bailer. Field parameters, including temperature, pH, and specific conductance, were collected on the initial purge volume and the final purge volume to confirm that formation water was being pumped and are recorded on groundwater sampling data sheets along with depth to water measurements and purge volumes for each well. Copies of the groundwater sampling data sheets are included in **Appendix A**.

Groundwater samples collected from the multi level well are collected utilizing a dedicated section of 3/8" polyethylene tubing and a de-coned foot (check) valve. The tubing is oscillated vertically in the well, allowing water to rise up the tubing to be collected. Sufficient water is purged from each well to insure that formation water was being collected. Ideally, the goal is to collect three casing volumes prior to sampling, but due to the soil conditions in the aquifer, this was not always achievable. In cases when the well goes dry prior to purging three casing volumes, the well is allowed to recharge so sufficient water could be collected for sampling.

Annual and quarterly groundwater samples are analyzed for VOC's designated in the NYSDEC Effluent Limitations and Monitoring Requirements by EPA Method 8240, with results only deliverables. PWGC



LEGEND

GW-4 — CANTOR BROTHERS MONITORING WELLS SELECTED WELLS TO BE MONITORED QUARTERLY AND SAMPLED YEARLY

MW-4 — WINMILT REALTY MONITORING WELLS SELECTED WELLS TO BE MONITORED MONTHLY AND SAMPLED QUARTERLY

SP-5 — SHOREWOOD PACKING MONITORING WELLS SELECTED WELLS TO BE MONITORED MONTHLY AND SAMPLED QUARTERLY

MONITORING WELL LOCATIONS

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Project:	Designed By:	Figure No:
MIN9603	JPR	7
CAD Operator: TC / KF	Approved By: PWG	Date: 05/05/03

will conduct the final round of groundwater sampling under ASP category B protocols.

4.6 Groundwater System Maintenance

Monthly maintenance checks are made to determine if the system is operating properly. During this routine maintenance, valves, vacuum and pressure gauges, flow meters, pumps, blowers, and the air/water separator will be visually inspected and appropriate readings recorded. Hours of system operation and downtime are noted.

4.6.1 Iron Treatment of Air Stripper Packing Media

The main maintenance concern for the groundwater remedial system is iron fouling of the air stripper packing media, which would reduce the efficiency of the treatment. A iron fouling contingency plan for the air stripper and liquid carbon polishing unit was presented in the March 1997 O&M plan. However, iron fouling of the packing media has not posed a problem to date. Iron is included in the monthly groundwater system influent and tower effluent sampling parameters and concentrations have been significantly less than a part per million (ppm). PWGC originally indicated that iron concentrations less than 1 ppm would not likely require treatment. Recent inspections of the packing media during the third quarter 2002, show that it is free from iron particulate and the air stripper continues to operate effectively.

Should iron fouling occur in the future, maintenance procedures will consist of treating the packing media with hydrogen peroxide as needed. The groundwater treatment system will be temporarily shut down prior to flushing the media with hydrogen peroxide. Following flushing, if necessary, the upper portions of the air stripping tower will be power washed to remove particulate debris. The resulting slurry will be collected in the concrete sump which contains the booster pump. The slurry will be removed via vacuum truck, following appropriate disposal characterization. Should this treatment be deemed ineffective, a complete change of the packing media may be necessary.

4.6.2 Recovery Wells and Pumps Iron Fouling - Past Treatment

Near the beginning of 2000, it was noticed that the combined groundwater pumping rate dropped from the typical rate of 220 gpm range to 120 gpm. Iron fouling was suspected and the decision was made to

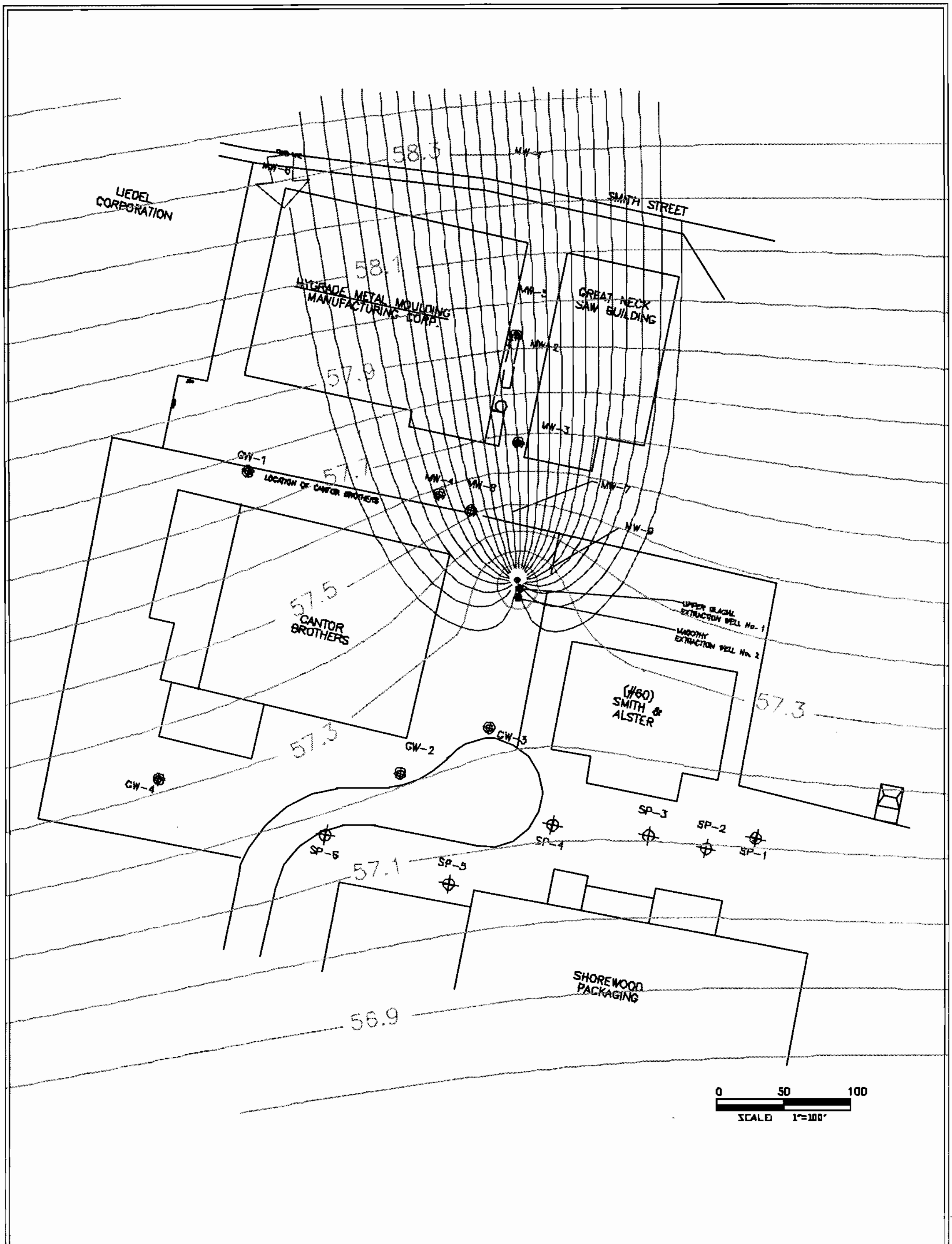
pull and replace the pumps and to allow for the cleaning of the wells. The groundwater pumps were replaced during July of 2000. The system was retrofitted with shorter length drop pipes so that the well cleaning can be performed within the building expansion that was planned for the site. The procedure to clean the wells and pumps is included below. Originally, the pumping rate increased from approximately 100 GPM to 165 GPM following the repair, which is still lower than the desired flow of 250 GPM. The lower flow rate was attributed to the upper glacial pump which is only operating at 130gpm. The flow then increased to 180 gpm, where it remained steady. The pumping rate is more than capable of capturing the plume. PWGC provided a groundwater flow model to the NYSDEC following the well repair in July 2000 (**Figure 8**). The model showed that even a flow rate of 80gpm was more than capable of capturing the contaminant plume.

In April of 2003, the system began to show signs of iron fouling as it did in 2000 so PWGC scheduled a clean out of the wells and pumps during May 2003. Both pumps were removed from the wells for servicing. While the pumps were removed, the wells were chemically treated to remove iron deposits. Following servicing of the pumps, the pumps were re-installed with new drop pipes. Approximately one month following the installation of the pumps the magothy pump failed. The magothy pump was removed and a new magothy pump was installed. Following the 2003 servicing of the wells, the upper glacial pump was operating at a rate of 120 gpm and the magothy well at a rate of 80 gpm with a combined pumping rate of 170 gpm. Since these repairs were done within the expanded Cantor Brothers building, PWGC does not foresee any future problems with access within the building. As was shown by **Figure 8**, this flow rate is more than capable of capable of capturing the contaminant plume.

Maintenance checks as well as monitoring information associated with the groundwater treatment system are recorded on system monitoring/maintenance sheets for inclusion in the quarterly reports.

4.6.3 Recovery Wells and Pumps Iron Fouling - Routine Maintenance

PWGC continues to assess the operation of the groundwater treatment system. Should cleaning of the wells and pumps be required again, the system will be taken off-line for several days as the pumps are removed from the wells. Since the cleaning procedure is labor intensive, it will be scheduled on a as needed basis rather than on a scheduled basis.



P.W. GROSSER CONSULTING
ENGINEER & HYDROGEOLOGIST, P.C.

GROUNDWATER FLOW MODEL

540 SMITH STREET

FARMINGDALE, NEW YORK

MN9603	8
RAD	
PWGC	
KF	08/12/03

4.6.4 Recovery Well and Pump Cleaning Procedure

Should the groundwater treatment system show signs of fouling, a well and pump cleaning should be scheduled. The procedure is as follows:

1. Shut down the system as described in section 3.2
2. Prepare a work area around the wells with plastic sheeting in order to keep spreading of the iron sludges to a minimum.
3. Beginning with the Upper Glacial Well, unbolt pump drop pipe from the pitless adaptor.
4. Using a drill rig, pull the drop pipe and pump from the well. As the drop pipe sections are removed, place them on plastic sheeting. Once the pump is removed, it should also be placed on plastic sheeting.
5. With the pump and piping removed, the well should be bailed and surged to remove debris and sludges that accumulated at the base of the well.
6. The well should then be developed by one of several accepted methods (surge blocking, over pumping, air lift) development water should be contained in a temporary storage tank.
7. Add the bio-film/mineral scale removing chemical (Nu-Well or equivilent) to the well and follow the chemicals recommendations for surging and time required for product to clean the well (typically over night).
8. A cleaning / de-con pad can be assembled to collect rinse water generated while pressure washing the drop pipes and pump. Rinse water can be pumped to the temporary storage tank.
9. Once the allotted time for the chemical to clean the well has passed, the well should again be developed to remove addition iron sludges and the well cleaning chemicals. As before, the development water should be transferred to the temporary holding tank.
10. Once the second development has been performed, the pump can be re-installed in the well with the cleaned drop pipe.
11. Repeat steps 3-10 for the second well.
12. Once sufficient time has passed to allow the iron to settle in the holding tank, the tank water can be pumped to system to be treated. The water in the tank can be pumped using a pump connected to the 2" tap located in the upper glacial pump manhole. The connection can be made with flexible 2" piping or hose.
13. Tank sludge, poly sheeting and other debris can be properly disposed of off-site in 55 gallon DOT drums.

5.0 ROUTINE MONITORING AND MAINTENANCE OF SVE REMEDIAL SYSTEM

Routine monitoring of the SVE remedial system includes monthly air monitoring of the system effluent with a PID, quarterly air effluent sampling, and maintenance/corrective actions. Remediation progress of the SVE system is also measured through volatile organic compound (VOC) mass removal calculations.

5.1 Monthly SVE System Air Monitoring

Air quality from ASP 3 (**Figure 3**) is monitored monthly. A Photovac PID equipped with an 11.7 eV lamp is used to collect readings of total VOC's to document the quality of air being discharged to the atmosphere and to check for relative increases in contaminant concentrations that may occur in response to changes in the environment. These readings are also compared to the laboratory air quality results obtained once per quarter. These readings are recorded on system monitoring/maintenance forms (**Appendix A**) for inclusion in quarterly reporting. The air samples will be collected as long as the SVE system is operational.

5.2 Quarterly SVE System Monitoring

The quarterly SVE influent sample is collected from ASP 3 (see **Figure 3**) using a sampling train (see **Figure 5**) consisting of tygon tubing connecting laboratory supplied carbon tubes in series to the appropriate air sampling port on the up stream side, and to a laboratory calibrated air sampling pump. The air sampling pump is used to collect the sample at a regulated rate so that an accurate volume of air collected can be calculated. An air sampling log is kept depicting start and stop flow rates and elapsed sampling time for air sample volume calculations and are included in the quarterly report. Currently, a volume of twenty (20) liters of air is collected (at one liter per minute for twenty minutes) for effluent sample analyses. The increased volume allows for lower detection limits since the effluent VOC concentrations have decreased significantly.

The quarterly air sample is analyzed for VOC's designated in the NYSDEC Effluent Limitations and Monitoring Requirements by EPA Method 5030 (purge and trap) followed by EPA Method 8240. The sample is reported with results only deliverables.

6.0 QUARTERLY REPORTING

At the end of each quarter, a report will be prepared and submitted to the NYSDEC to document the system performance and remedial progress. Remedial progress will be presented based on VOC mass removal calculations and VOC removal trend analysis in graphical form. The report will present appropriate groundwater, groundwater system influent and effluent, air stripper tower effluent, and influent SVE air quality analytical sampling results in table format. The groundwater system influent sample results will also be presented as a groundwater VOC concentration trend analysis in graphical form. The report will include both a quarterly groundwater elevation and contaminant concentration contour map. In addition, routine monitoring/maintenance sheets containing system monitoring and maintenance records, quarterly groundwater sampling data forms for individual monitoring wells, and copies of the instrument specific calibration logs will be incorporated into the report and any corrective action to optimize the effectiveness of the treatment system will be described. Appropriate conclusions with regard to system performance and remedial progress of the site will be made.

PWGC plans on "streamlining" the quarterly report. The quarterly report will include the maps, tables, evaluation of the system operation, evaluation of vapor/liquid phase carbon, mass removal rates and a discussion of the results. Detailed explanations of the remedial system, site history and site description will not be included in the routine quarterly report. A comprehensive annual report will be prepared to reflect a complete sampling round along with the site history for the benefit of readers not familiar with the site.

PWGC will prepare a periodic heat, material, and mass transfer balance to ensure that freezing will not occur during winter months. Currently the system has been for eight years and significant freezing of the system has not occurred. The system operated through the 2003-2004 winter during sustained freezing temperatures without shutting down. Should the system shut down during winter months, PWGC will respond to the system and drain standing water from the system to prevent damage if the system is unable to be re-started. PWGC will submit the heat transfer balance calculations under separate cover.

7.0 SUPPLEMENTAL SITE REMEDIATION

Routinely, to enhance groundwater remediation at the site, groundwater was temporarily pumped directly from MW-3 to the remedial system during quarterly sampling events. PWGC implemented this due to the high concentration of contaminants found in MW-3. In past sampling events, groundwater samples collected before and after pumping demonstrated the effectiveness of the pumping program. The effectiveness is related to the removal of groundwater with the highest degree of contamination directly, instead of waiting for the impacted groundwater to migrate 150' under induced flow to the extraction wells. Given the results obtained from MW-3 during the year 2000 PWGC continued this practice through 2003. Currently, groundwater impact in MW-3 is nearly non-detect and supplemental is no longer warranted. Should contaminant levels in MW-3 increase, PWGC will begin pumping of MW-3 on a monthly basis. The MW-3 pumping visit will be performed during the monthly water level and system sampling visit. MW-3 will be pumped at approximately 4 gpm for 4 - 6 hours. A copy of the MW-3 pumping method is included as **Appendix C**. Prior to PWGC deciding on the above method, PWGC performed a risk/benefit analysis of several other supplemental remdiation options which are discussed below. PWGC will perform additional cost / benefit analysis of various remediation techniques in the future.

Surfactant/Co-solvent Flushing

In-situ flushing consists of the injection of a fluid which is specifically matched to the DNAPL and geologic conditions present to either increase the solubility of the DNAPL so that it dissolves more readily into the flushing water or to lower the DNAPL-water interfacial tension to the point where it becomes mobile. In both cases the goal is to flush DNAPL from the aquifer to a recovery well where it can be extracted either as a dissolved or free phase liquid.

Applicability - Since there is no evidence of DNAPL present, there is no clear benefit of surfactant/co-solvent flushing. There is also a concern with recovering all of the flushing agents used and possible vertical migration of DNAPL (if present).

Oxidation

Oxidation processes involve initiating an oxidation-reduction reaction (exchange of electrons between

species) to break carbon bonds and either destroy the organic compound or convert it to a smaller, less hazardous compound. The three most common chemical oxidation technologies used at hazardous waste sites are: potassium permanganate, hydrogen peroxide + catalyst (Fenton's reagent) and ozone.

Applicability - Oxidation reactions can be used to treat dissolved components as wells as DNAPL, so the technology could be used at this site. The potential disadvantages include the creation of hazardous intermediate compounds due to incomplete reactions and the build up of explosive forces (pressure) in the subsurface.

Dynamic Stripping

Dynamic stripping employs steam injection or thermal element heating to mobilize sorbed phase DNAPL as a vapor where it can be recovered by an SVE system. Steam injection requires a substantial capacity to generate and deliver steam to the subsurface. Thermal element heating employs a series of implanted electrodes which are connected to a high output electric current. Thermal heating of the vadose zone and aquifer can mobilize DNAPL by decreasing it's vapor pressure and reducing it's viscosity. Steam is also typically generated in-situ during the process which can transport the DNAPL as a vapor to a soil vapor extraction system.

Applicability - The technology is primarily employed to mobilize sorbed phase DNAPL which is not expected to be present at the site. The considerable amount of steam or electric power required typically limits the technology to large scale sites which have generating capability as part of the standard facility operations.

Air Sparging

Air sparging injects air below the water table to affect a mass transfer of sorbed phase DNAPL, trapped below the static water table, to the vapor phase where it can be recovered by an SVE system. It can also be employed to affect mass transfer from the dissolved phase to the vapor phase, though it is less commonly applied in this manner at chlorinated sites due to the vertical distribution of the plume throughout the aquifer.

Applicability - There is no evidence of sorbed DNAPL below the water table so the primary function of air sparging would not apply to this site. Air sparging is also limited for the most part to shallow conditions (10-15 ft below W.T.). The depth of the dissolved phase plume at this site would prohibit the use of the technology for this purpose.

Biogradation Enhancement Products

Biodegradation of chlorinated solvents such as PCE most commonly occurs through reductive dechlorination in which the PCE is the electron acceptor and hydrogen is the donor. The process is sequential from tetrachloroethene (PCE) to trichloroethylene (TCE) to dichloroethylene (DCE) to vinyl chloride (VC) to ethene. Anerobic conditions are required for PCE and TCE degradation to prevent the dissolved oxygen from becoming the preferred acceptor. Aerobic conditions are usually preferred for DCE and VC degradation. In addition, an appropriate source of carbon for microbial growth is required. Commercial products are available such as Hydrogen Release Compound (HRC) to release hydrogen at an optimal rate in addition to providing the carbon source.

Applicability - The rate of reductive dechlorination decreases as the degree of chlorination decreases, so it is possible, if not likely, that once initiated the process may not achieve completion without further enhancements. However, if sorbed phase PCE is present, reducing PCE levels would presumably increase the concentration gradient and facilitate PCE desorption. PCE transformation products TCE and DCE also have a lower retardation rate than PCE, which would speed up transport to the extraction wells.

Additional Recover Well Installation

Based upon the improvements gained by supplemental pumping of MW-3, a permanent recovery well could be installed in the vicinity of MW-3. A six inch well and with a 20 - 40 gpm pump could be installed in the vicinity of MW-3 would provide constant removal of impacted groundwater in the vicinity of the former source area. The recovery well effluent would be piped to the existing system for treatment.

Applicability - Due to the recent substantial decreases noted in the MW-3 concentrations, the minimal benefit gained from the new well would not justify the expense of the new well, the pump and the piping / electrical trench required between the pump and the system building. Currently, the highest levels of

impact noted at the site is from the upper glacial and magothy wells. If the levels of MW-3 increase to a substantially higher concentration than the upper glacial and magothy wells, PWGC will re-evaluate the possibility of adding a third recovery well at that point.

Based upon the current groundwater data, significant groundwater impact is no longer present at the site. PWGC is currently evaluating oxidizing agent injection (potassium permanganate) in the area between MW-3 and the recovery wells. Upon completion of the evaluation of alternative site remedial methods, PWGC will prepare an applicable workplan.

8.0 SITE REMEDIATION AND SHUT-DOWN OF THE SYSTEM

Both the SVE and groundwater treatment systems will be routinely monitored, as described in section 4.0, to determine when the soil and groundwater have been adequately remediated. Site remediation will be based on the analysis of the quarterly reports and comparison to baseline conditions. In addition, prior to the final shut down of the remedial systems, PWGC will conduct a soil gas survey in the vicinity of the 540 Smith Street building, as well as the Great Neck Saw building to the east of the site.

8.1 Baseline Soil Quality

As described in section 3.1, a combined influent air quality sample was collected upon system start-up. This air quality sample analysis represented soil conditions and was used as a baseline soil condition for comparison purposes. Analytical results of soil samples collected within the source area will also be used as baseline soil quality with regard to soil remediation. The source area has been designated along the east side of the Minmilt building, from the area of boring B-1, south to the area of MW-2 (**Figure 2**). Analytical results for soil samples collected within the source area in December, 1992 are reported in the *Investigation Report*.

8.2 Shut-down of the SVE Remedial System

Soil quality remedial progress is monitored through routine air influent sampling and expressed as contaminant mass removal. Through the second quarter 2003 an estimated 5,245 pounds of total VOC's have been removed by the SVE system. This accounts for approximately 95% of the estimated original contaminant mass of 5,500 pounds and it appears that mass removal rates have reached the asymptotic low range.

Based upon the above results, PWGC began to initiate the SVE system shut down procedure. In order to document the effectiveness of the source removal and to determine if soil remediation was complete, a sub-surface soil investigation was performed during the second quarter 2000 as per the original O&M plan. A total of four borings were performed throughout the source area as shown on **Figure 2**. The results of the investigation showed that soil quality in three of the borings were well below NYSDEC TAGM levels. However, TAGM guidance values were exceeded at one boring location, with the greatest concentration of PCE detected in shallow soils at approximately 7-10 feet below grade at boring SB-1.

PWGC concluded that the SVE system has been effective in removing contamination from the source area with the soil results supporting the mass removal calculation of approximately 95%. The detection of PCE above TAGM guidance levels appeared to be related to a small stagnation zone that lies between the two SVE wells.

In order to capture the contamination located within the stagnation zone located between the two SVE wells, the flow to SVE Well #1 was reduced on February 27, 2001. The vacuum applied to SVE Well #1 was reduced by approximately 50%. The vacuum applied to SVE Well#2 was increased by nearly 160%. The system continues to operate at this capacity to date. The SVE system will continue to operate, at a minimum, for as long as the pump and treat system is in operation. In order to document that the SVE system is effectively remediating the area identified as the stagnant zone, PWGC plans on collecting vacuum readings from the surrounding wells and temporary vapor monitoring points installed in the stagnant zone.

PWGC will continue to operate the SVE system as long as the groundwater extraction system is in operation. Continued operation of the SVE system will prevent soil gas vapors from being re-entrained in the vadose zone and ensure that vapors are not entering the buildings in the vicinity of the source area.

8.3 Baseline Groundwater Quality

As described in section 4.5, prior to start-up of the groundwater remediation system, a complete round of groundwater samples (including Minmilt Realty monitoring wells MW-1 through MW-9 with the exception of MW-3, Cantor Brothers wells GW-1 through GW-4, and Shorewood Packaging wells SP-1 through SP-6) were collected as described in section 4.5. This groundwater sampling event will serve to establish baseline groundwater quality at the site (including up gradient groundwater quality) for comparison purposes.

8.4 Soil Gas / Indoor Air Survey

Prior to the shut down of the remedial system, PWGC will perform a soil gas survey in the vicinity of the 540 Smith Street building and the Great Neck Saw Building. Approximately one week prior to sampling, PWGC will shut down the SVE system to allow subsurface conditions to stabilize so the samples may be

collected without active remediation of the sub-surface soils occurring. PWGC will also collect air samples from within the 540 Smith Street building to ensure that vapors did not migrate into the building. A Soil Gas / Indoor Air Survey Workplan will be prepared under separate cover and submitted for approval prior to the shutdown of the SVE system. The workplan will include sampling locations, methods, and QA/QC requirements. The results of the soil gas / indoor air survey will be used to determine when remediation is completed, but the SVE system will continue to operate until the overall system is shut down.

8.5 Shut-down of the Groundwater Remedial System

The progress of groundwater remediation will be monitored through the collection of quarterly groundwater quality samples as described in section 4.3. During each sampling event, downgradient groundwater quality will be compared to upgradient groundwater quality and current NYSDEC groundwater standards. Once downgradient groundwater quality data becomes consistent with upgradient background concentrations, groundwater sampling data will be compared to baseline groundwater sampling results to determine relative groundwater remediation. Based on these evaluations, a petition will be made to perform a final round of groundwater sampling prior to the shut-down of the pump and treat system. System shut-down may occur in a phased approach by taking one of the two extraction wells off line at a time, or all at once. Prior to the shut-down of part or all of the pump and treat system, NYSDEC approval will be obtained.

STATE OF NEW YORK
DEPARTMENT OF HEALTH

Flanigan Square, 547 River Street, Troy, New York 12180-2216

Antonia C. Novello, M.D., M.P.H., Dr.P.H.
Commissioner

Dennis P. Whalen
Executive Deputy Commissioner

March 22, 2005

Ms. Kelly Lewandowski
Bureau of Hazardous Site Control
Division of Environmental Remediation
NYS Department of Environmental Conservation
625 Broadway Street, 11th Floor
Albany, NY 12233-7014

Re: Site Investigation Information
Minmilt Realty Site
Site No. 152147
Babylon, Suffolk County

Dear Ms. Lewandowski:

Staff reviewed the February 11, 2005 Site Investigation Information Package for the Minmilt Realty Site, (T) Babylon, Suffolk County. Based on that review, I understand that the selected remedy is operating as designed and as specified in the Record of Decision. The operation, maintenance, and monitoring plan includes long-term groundwater monitoring and continued operation of the soil vapor extraction system as long as the groundwater recovery system is operating. Indoor air will be monitored to confirm that soil vapor intrusion is not affecting indoor air quality while the soil vapor extraction system is operating. Post-remedial samples of soil, groundwater, and subsurface vapor will be evaluated to determine the need for institutional controls at the site.

Based on this information, I concur with the recommended reclassification of this site from a Class 2 to a Class 4. The signed decision form is enclosed.

If you have any questions, please contact Mr. Richard Fedigan of my staff at (518) 402-7870.

Sincerely,

Steven M. Bates, Assistant Director
Bureau of Environmental Exposure Investigation

Enclosure

cc: G. Litwin/R. Fedigan/File
C. Vasudevan/G. Bobersky - NYSDEC
W. Parish, NYSDEC-Region 1
S. Robbins - SCDHS

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF ENVIRONMENTAL REMEDIATION

10/24/03

SITE INVESTIGATION INFORMATION

1. SITE NAME	2. SITE NUMBER	3. TOWN/CITY/VILLAGE	4. COUNTY
Minmilt Realty Corporation	**1-52-147**	**Babylon, East Farmingdale**	**Suffolk County**

5. REGION	6. PROGRAM TYPE
1	BCP ☐ ERP ☐ SPILL ☐ SUPERFUND ☐X If Superfund: Current 2 Proposed 4 Modification _____

7. LOCATION OF SITE (Attach U.S.G.S. Topographic Map showing site location)

a. Quadrangle: Huntington

b. Site Latitude 40° 45' 24" N
Site Longitude 73° 24' 20" W

c. Tax Map Number(s) District 0100 Section 006,
Block 1 lot 25

d. Site Street Address: 540 Smith Street
E. Farmingdale NY 11735

8. BRIEFLY DESCRIBE THE SITE (Attach site map showing disposal/sampling locations)

This site is a metal forming facility consisting of a one-story industrial building on a 2.28 acre parcel. Industrial activities at this site included the use of a vapor degreaser that used tetrachloroethylene (PCE). The spent degreasing solvent was disposed into a leaching pool on-site. After an initial investigation, under an order with the Suffolk County Department of Health Services (SCDHS), an order on consent (CO) was signed on November 7, 1994 between the NYSDEC and the current owner to conduct an RI/FS and an IRM. The RI found that soils on the east side of the building were highly contaminated with PCE at levels up to 820 ppm, and groundwater contained PCE at levels up to 140,000 ppb. An Interim Remedial Measure (IRM) consisting of soil vapor extraction (SVE) and groundwater pump and treat went on-line in February 1997 and continue to operate. The SCDHS installed a monitoring well and took hydro punch samples on Central Avenue, about 1500 feet downgradient of the site, in July 1997. This sampling revealed a PCE plume migrating from the site in the deeper aquifer. An investigation of the off-site groundwater plume commenced in December 1998. Vapor phase activated carbon treatment was removed from the SVE off gas in April 1999 as it was no longer required. The groundwater component is containing the plume. The off-site RI/FS was finalized and a ROD calling for the continued operation of the SVE system to address the soil contamination and the extraction and treatment of the groundwater to address the groundwater contamination was signed on March 3, 2002. Operation, maintenance and monitoring continues and soils testing and shallow monitoring wells indicated that soils have, for the most part, been remediated and shallow groundwater has been restored to non-detect or below groundwater standards. The deeper groundwater being contained by the groundwater extraction and treatment system continues under operation, maintenance and monitoring. To date, more than 5,200 pounds of PCE has been removed from the soils and 24,000 pounds from the groundwater. The SVE system, with influence beneath the Minmilt Realty building, continues to run to ensure that soil vapor intrusion is not an issue. As part of the closure procedure, Minmilt will submit a soil gas/ indoor air survey work plan for DEC/DOH review to reconfirm that vapor intrusion is not an issue.

a. Area 2.8 acres b. Completed: ( ) Env. Property Assessment () Site Characterization ( ) SI ( ) ESI ( ) IRM ( )RI ( ) Construction (X) OM&M ( ) Spill Response _ Other (X)Reclassification to Class 4 for O, M & M

9. CONTAMINANTS DISPOSED (Hazardous Waste, Petroleum, Other. Includes EPA Hazardous Waste Numbers)

Waste solvents discharged to the drywell on the east side of the 540 Smith Street Building contained Tetrachlorethene (PCE) F001 Waste. The PCE source has been removed from soils and shallow groundwater through the IRM and continued O,M &M.

10. ANALYTICAL DATA AVAILABLE

The analytical highlights of the 3rd quarter monitoring report is attached for details on the current analytical data.

a. ( )Air (X)Groundwater ( )Surface Water ( )Sediment ()Soil ( )Waste ( )Leachate ( )EPTox ( )TCLP

b. Contravention of Standards or Guidance Values: The onsite shallow groundwater wells are now all either below groundwater standards or non-detect for site related contamination. Deeper groundwater at the downgradient recovery wells is still contaminated and the groundwater extraction and treatment system will continue to operate accordingly. Soils beneath the former source area have been successfully remediated and indoor air testing during the RI was non-detect for site related volatile organic compounds. In addition, Minmilt has made part of the Operation, maintenance and monitoring plan the continued operation of the Soil Vapor Extraction system as long as the groundwater recovery system is operating to ensure that soil vapor intrusion will not be an issue.

11. CONCLUSION: The selected remedy is operating as designed and as specified in the Record of Decision (ROD). The soil vapor extraction (SVE) has removed the source of soil contamination and the groundwater extraction and treatment system system has restored the shallow groundwater to non-detect or below groundwater standard conditions. The SVE system, with influence beneath the building will continue to operate and soil vapor intrusion is likely not an issue. This will be confirmed by a NYSDEC/NYSDOH approved work plan prior to site delisting. Currently, the site will be reclassified to 4, for operation, maintenance and monitoring.

a. Institutional Controls (IC) Required? ((X)Y)N * b. If yes, identify c. Are these ICs in place and verified? ( ) Y ((X)N *

* - Institutional control(s) are contingent on the ability of the site remediation to restore the site soils and groundwater beneath the site to pre-disposal and/or below regulatory and guidance criteria conditions. Based on the success to date of the site remediation, ICs will not likely be necessary for this site. A final determination will be made at the time a petition is made to de-list the Minmilt realty site from the registry of Inactive Hazardous Waste Disposal sites.

12. SITE IMPACT DATA

a. Nearest Surface Water: Distance 13,200 ft. Direction Class 2

b. Groundwater: Depth 42 ft. Flow Direction SSE (x)Sole Source ( )Primary ( )Other High-Yield Aquifer

c. Water Supply: Distance 2,000 ft. Direction West Active (X)Yes ( )No

d. Nearest Building: Distance 10 ft. Direction *West* Use Commercial

e. Documented fish or wildlife mortality? ( )Y (x)N

f. Impact on special status fish or wildlife resource? ( )Y (x)N

g. Controlled Site Access? (X)Y ( )N

h. Exposed hazardous waste? ( )Y (x)N

i. Site Priority Ranking Sheet 260----Impact Score

j. EPA ID# NYD001489269 HRS Score N/A

13. SITE OWNER'S NAME	14. ADDRESS	15. TELEPHONE NUMBER
Minmilt Realty Corp.	40 Santa Barbara Drive Plainview, NY 11803	c/o-P.W. Grosser Inc 631-589-5353

16. PREPARER: Steven M. Scharf, P.E.	17. APPROVED
Signature *Steven M. Scharf* Date February 11, 2005	Signature Walter J. Parish 2/25/05 Date
Name, Title, Organization :Steven M. Scharf NYSDEC-DER: Environmental Engineer I	WALTER J. PARISH RHWRE Region 1 Name, Title, Organization

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF ENVIRONMENTAL REMEDIATION

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a. Institutional Controls (IC) Required? ((X)Y)N * b. If yes, identify c. Are these ICs in place and verified? ( ) Y ((X)N *

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c. Water Supply: Distance 2,000 ft.	Direction West		Active (X)Yes ( )No	
d. Nearest Building: Distance 10 ft.	Direction *West*		Use Commercial	
e. Documented fish or wildlife mortality?	( )Y	(x)N	h. Exposed hazardous waste?	( )Y (x)N
f. Impact on special status fish or wildlife resource?	( )Y	(x)N	i. Site Priority Ranking Sheet 260---Impact Score	
g. Controlled Site Access?	(X)Y	( )N	j. EPA ID# NYD001489269	HRS Score N/A

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Minmilt Realty Corp.	40 Santa Barbara Drive Plainview, NY 11803	c/o-P.W. Grosser Inc 631-589-5353

16. PREPARER: Steven M. Scharf, P.E.	17. APPROVED
Signature *Steven M. Scharf* Date February 11, 2005	Signature 3/22/05 Date
Name, Title, Organization :Steven M. Scharf NYSDEC-DER: Environmental Engineer I	Steven M. Butts Asst. Dir. BEEI, NYSDOH Name, Title, Organization

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Minmilt Realty Corp.	40 Santa Barbara Drive Plainview, NY 11803	c/o-P.W. Grosser Inc 631-589-5353

16. PREPARER: Steven M. Scharf, P.E.	17. APPROVED
Signature *Steven M. Scharf* Date February 11, 2005	Signature [signature] Date 3/18/05
Name, Title, Organization :Steven M. Scharf NYSDEC-DER: Environmental Engineer	RICHARD H. DANA, COORDN, TSS, DER Name, Title, Organization