

Source Property Information

CLOSURE DATE: 10/06/2000

BRRTS #:

03-05-000194

ACTIVITY NAME:

GREEN BAY WATER UTILITY

FID #:

405035620

PROPERTY ADDRESS:

631 S Adams St

DATCP #:

MUNICIPALITY:

Green Bay

PECFA#:

54301379931A

PARCEL ID #:

15-36

***WTM COORDINATES:**

WTM COORDINATES REPRESENT:

X:

677490

Y:

450085

Approximate Center Of Contaminant Source

** Coordinates are in
WTM83, NAD83 (1991)*

Approximate Source Parcel Center

Please check as appropriate: (BRRTS Action Code)

CONTINUING OBLIGATIONS

Contaminated Media for Residual Contamination:

Groundwater Contamination > ES (236)

Soil Contamination > *RCL or **SSRCL (232)

Contamination in ROW

Contamination in ROW

Off-Source Contamination

Off-Source Contamination

*(note: for list of off-source properties
see "Impacted Off-Source Property Information,
Form 4400-246")*

*(note: for list of off-source properties
see "Impacted Off-Source Property Information,
Form 4400-246")*

Site Specific Obligations:

Soil: maintain industrial zoning (220)

Cover or Barrier (222)

*(note: soil contamination concentrations
between non-industrial and industrial levels)*

Direct Contact

Soil to GW Pathway

Structural Impediment (224)

Vapor Mitigation (226)

Site Specific Condition (228)

Maintain Liability Exemption (230)

*(note: local government unit or economic
development corporation was directed to
take a response action)*

Monitoring Wells:

Are all monitoring wells properly abandoned per NR 141? (234)

Yes No N/A

* Residual Contaminant Level

**Site Specific Residual Contaminant Level

This Adobe Fillable form is intended to provide a list of information that is required for evaluation for case closure. It is to be used in conjunction with Form 4400-202, Case Closure Request. The closure of a case means that the Department has determined that no further response is required at that time based on the information that has been submitted to the Department.

NOTICE: Completion of this form is mandatory for applications for case closure pursuant to ch. 292, Wis. Stats. and ch. NR 726, Wis. Adm. Code, including cases closed under ch. NR 746 and ch. NR 726. The Department will not consider, or act upon your application, unless all applicable sections are completed on this form and the closure fee and any other applicable fees, required under ch. NR 749, Wis. Adm. Code, Table 1 are included. It is not the Department's intention to use any personally identifiable information from this form for any purpose other than reviewing closure requests and determining the need for additional response action. The Department may provide this information to requesters as required by Wisconsin's Open Records law [ss. 19.31 - 19.39, Wis. Stats.].

BRRTS #:	03-05-000194 (No Dashes)	PARCEL ID #:	15-36		
ACTIVITY NAME:	GREEN BAY WATER UTILITY	WTM COORDINATES: X:	677490	Y:	450085

CLOSURE DOCUMENTS (the Department adds these items to the final GIS packet for posting on the Registry)

- Closure Letter**
- Maintenance Plan** (if activity is closed with a land use limitation or condition (land use control) under s. 292.12, Wis. Stats.)
- Continuing Obligation Cover Letter** (for property owners affected by residual contamination and/or continuing obligations)
- Conditional Closure Letter**
- Certificate of Completion (COC)** (for VPLE sites)

SOURCE LEGAL DOCUMENTS

- Deed:** The most recent deed as well as legal descriptions, for the **Source Property** (where the contamination originated). Deeds for other, off-source (off-site) properties are located in the **Notification** section.
Note: If a property has been purchased with a land contract and the purchaser has not yet received a deed, a copy of the land contract which includes the legal description shall be submitted instead of the most recent deed. If the property has been inherited, written documentation of the property transfer should be submitted along with the most recent deed.
- Certified Survey Map:** A copy of the certified survey map or the relevant section of the recorded plat map for those properties where the legal description in the most recent deed refers to a certified survey map or a recorded plat map. (lots on subdivided or platted property (e.g. lot 2 of xyz subdivision)).
Figure #: **Title:**
- Signed Statement:** A statement signed by the Responsible Party (RP), which states that he or she believes that the attached legal description accurately describes the correct contaminated property.

MAPS (meeting the visual aid requirements of s. NR 716.15(2)(h))

- Maps must be no larger than 11 x 17 inches unless the map is submitted electronically.
- Location Map:** A map outlining all properties within the contaminated site boundaries on a U.S.G.S. topographic map or plat map in sufficient detail to permit easy location of all parcels. If groundwater standards are exceeded, include the location of all potable wells within 1200 feet of the site.
Note: Due to security reasons municipal wells are not identified on GIS Packet maps. However, the locations of these municipal wells must be identified on Case Closure Request maps.
Figure #: 1 **Title: Location Map**
 - Detailed Site Map:** A map that shows all relevant features (buildings, roads, individual property boundaries, contaminant sources, utility lines, monitoring wells and potable wells) within the contaminated area. This map is to show the location of all contaminated public streets, and highway and railroad rights-of-way in relation to the source property and in relation to the boundaries of groundwater contamination exceeding a ch. NR 140 Enforcement Standard (ES), and/or in relation to the boundaries of soil contamination exceeding a Residual Contaminant Level (RCL) or a Site Specific Residual Contaminant Levels (SSRCL) as determined under s. NR 720.09, 720.11 and 720.19.
Figure #: **Title:**
 - Soil Contamination Contour Map:** For sites closing with residual soil contamination, this map is to show the location of all contaminated soil and a single contour showing the horizontal extent of each area of contiguous residual soil contamination that exceeds a Residual Contaminant Level (RCL) or a Site Specific Residual Contaminant Level (SSRCL) as determined under s. NR 720.09, 720.11 and 720.19.
Figure #: **Title:**

BRRTS #: 03-05-000194

ACTIVITY NAME: GREEN BAY WATER UTILITY

MAPS (continued)

Geologic Cross-Section Map: A map showing the source location and vertical extent of residual soil contamination exceeding a Residual Contaminant Level (RCL) or a Site Specific Residual Contaminant Level (SSRCL). If groundwater contamination exceeds a ch. NR 140 Enforcement Standard (ES) when closure is requested, show the source location and vertical extent, water table and piezometric elevations, and locations and elevations of geologic units, bedrock and confining units, if any.

Figure #: **Title:**

Figure #: **Title:**

Groundwater Isoconcentration Map: For sites closing with residual groundwater contamination, this map shows the horizontal extent of all groundwater contamination exceeding a ch. NR140 Preventive Action Limit (PAL) and an Enforcement Standard (ES). Indicate the direction and date of groundwater flow, based on the most recent sampling data.

Note: This is intended to show the total area of contaminated groundwater.

Figure #: 7 **Title: Groundwater Contour Map 05/27/98**

Groundwater Flow Direction Map: A map that represents groundwater movement at the site. If the flow direction varies by more than 20° over the history of the site, submit 2 groundwater flow maps showing the maximum variation in flow direction.

Figure #: 7 **Title: Groundwater Contour Map 05/27/98**

Figure #: **Title:**

TABLES (meeting the requirements of s. NR 716.15(2)(h)(3))

Tables must be no larger than 11 x 17 inches unless the table is submitted electronically. Tables must not contain shading and/or cross-hatching. The use of **BOLD** or *ITALICS* is acceptable.

Soil Analytical Table: A table showing remaining soil contamination with analytical results and collection dates.

Note: This is one table of results for the contaminants of concern. Contaminants of concern are those that were found during the site investigation, that remain after remediation. It may be necessary to create a new table to meet this requirement.

Table #: **Title:**

Groundwater Analytical Table: Table(s) that show the most recent analytical results and collection dates, for all monitoring wells and any potable wells for which samples have been collected.

Table #: 11-13 **Title: Groundwater Analytical Results, GWAnalysis-Post Remediation, GW Extraction Wells**

Water Level Elevations: Table(s) that show the previous four (at minimum) water level elevation measurements/dates from all monitoring wells. If present, free product is to be noted on the table.

Table #: 14 **Title: Groundwater Elevations**

IMPROPERLY ABANDONED MONITORING WELLS

For each monitoring well not properly abandoned according to requirements of s. NR 141.25 include the following documents.

Note: If the site is being listed on the GIS Registry for only an improperly abandoned monitoring well you will only need to submit the documents in this section for the GIS Registry Packet.

Not Applicable

Site Location Map: A map showing all surveyed monitoring wells with specific identification of the monitoring wells which have not been properly abandoned.

Note: If the applicable monitoring wells are distinctly identified on the Detailed Site Map this Site Location Map is not needed.

Figure #: **Title:**

Well Construction Report: Form 4440-113A for the applicable monitoring wells.

Deed: The most recent deed as well as legal descriptions for each property where a monitoring well was not properly abandoned.

Notification Letter: Copy of the notification letter to the affected property owner(s).

BRRTS #: 03-05-000194

ACTIVITY NAME: GREEN BAY WATER UTILITY

NOTIFICATIONS

Source Property

Not Applicable

Letter To Current Source Property Owner: If the source property is owned by someone other than the person who is applying for case closure, include a copy of the letter notifying the current owner of the source property that case closure has been requested.

Return Receipt/Signature Confirmation: Written proof of date on which confirmation was received for notifying current source property owner.

Off-Source Property

Group the following information per individual property and label each group according to alphabetic listing on the "Impacted Off-Source Property" attachment.

Not Applicable

Letter To "Off-Source" Property Owners: Copies of all letters sent by the Responsible Party (RP) to owners of properties with groundwater exceeding an Enforcement Standard (ES), and to owners of properties that will be affected by a land use control under s. 292.12, Wis. Stats.

Note: Letters sent to off-source properties regarding residual contamination must contain standard provisions in Appendix A of ch. NR 726.

Number of "Off-Source" Letters:

Return Receipt/Signature Confirmation: Written proof of date on which confirmation was received for notifying any off-source property owner.

Deed of "Off-Source" Property: The most recent deed(s) as well as legal descriptions, for all affected deeded **off-source property(ies)**. This does not apply to right-of-ways.

Note: If a property has been purchased with a land contract and the purchaser has not yet received a deed, a copy of the land contract which includes the legal description shall be submitted instead of the most recent deed. If the property has been inherited, written documentation of the property transfer should be submitted along with the most recent deed.

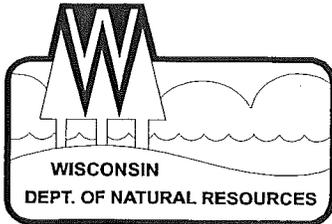
Certified Survey Map: A copy of the certified survey map or the relevant section of the recorded plat map for those properties where the legal description in the most recent deed refers to a certified survey map or a recorded plat map. (lots on subdivided or platted property (e.g. lot 2 of xyz subdivision)).

Figure #:

Title:

Letter To "Governmental Unit/Right-Of-Way" Owners: Copies of all letters sent by the Responsible Party (RP) to a city, village, municipality, state agency or any other entity responsible for maintenance of a public street, highway, or railroad right-of-way, within or partially within the contaminated area, for contamination exceeding a groundwater Enforcement Standard (ES) and/or soil exceeding a Residual Contaminant Level (RCL) or a Site Specific Residual Contaminant Level (SSRCL).

Number of "Governmental Unit/Right-Of-Way Owner" Letters:



State of Wisconsin \ DEPARTMENT OF NATURAL RESOURCES

Tommy G. Thompson, Governor
George E. Meyer, Secretary
Ronald W. Kazmierczak, Regional Director

Northeast Region Headquarters
1125 N. Military Ave., P.O. Box 10448
Green Bay, Wisconsin 54307-0448
Telephone 920-492-5800
FAX 920-492-5913
TDD 920-492-5912

October 6, 2000

Mr. Dave Wittig
Green Bay Water Utility
631 South Adams Street
Green Bay, Wisconsin 54301

Subject: Case Closure, Green Bay Water Utility, 631 South Adams Street, Green Bay,
Wisconsin BRRTS #: 03-05-000194

Dear Mr. Wittig:

The Department has received a copy of the completed groundwater use restriction for the above referenced site and proof of filing of this record with the Brown County Register of Deeds. The Department has also received the completed monitoring well abandonment forms. Based on the investigative and remedial documentation provided to the Department, it appears that the petroleum contamination at the above named site has been remediated to the extent practicable under current site conditions. Therefore, conditional closure of this site has been granted and no further action is necessary at this time. In the future, this groundwater use restriction may be amended with approval from the Department if conditions change at the site and the residual contamination has been remediated.

If you have any additional relevant information concerning this matter which was not formerly provided to the Department, you should submit this information to the Department for reevaluation.

The Department's records for this case will now reflect final "closure." If you have any questions regarding this determination, please contact me in Green Bay at 920-492-5861. The Department appreciates the actions taken by the Green Bay Water Utility to remediate this site.

Yours truly,

Alan Thomas Nass, P.G., P.S.
Hydrogeologist

cc: James Caine, Robert E. Lee & Associates, 2825 South Webster Avenue, P.O. Box
2100, Green Bay, Wisconsin 54306-2100

812, Wis. Adm. Code. Special well construction standards or water treatment requirements, or both, or well construction prohibitions may apply.

NOW THEREFORE, the owner hereby declares that all of the property described above is held and shall be held, conveyed or encumbered, leased, rented, used, occupied and improved subject to the following limitation and restrictions:

Anyone who proposes to construct or reconstruct a well on this property is required to contact the Department of Natural Resources' Bureau of Drinking Water and Groundwater, or its successor agency, to determine what specific requirements are applicable, prior to constructing or reconstructing a well on this property. No well may be constructed on this property unless applicable requirements are met.

If construction is proposed on this property that will require dewatering, or if groundwater is to be otherwise extracted from this property, while this groundwater use restriction is in effect, the groundwater shall be sampled and analyzed for contaminants that were previously detected on the property and any extracted groundwater shall be managed in compliance with applicable statutes and rules.

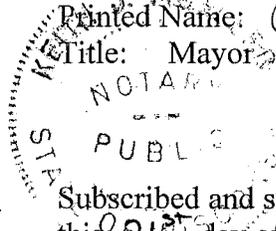
This restriction is hereby declared to be a covenant running with the land and shall be fully binding upon all persons acquiring the above-described property whether by descent, devise, purchase or otherwise. This restriction benefits and is enforceable by the Wisconsin Department of Natural Resources, its successors or assigns. The Department, its successors or assigns, may initiate proceedings at law or in equity against any person or persons who violate or are proposing to violate this covenant, to prevent the proposed violation or to recover damages for such violation.

Any person who is or becomes owner of the property described above may request that the Wisconsin Department of Natural Resources or its successor issue a determination that one or more of the restrictions set forth in this covenant is no longer required. Upon the receipt of such a request, the Wisconsin Department of Natural Resources shall determine whether or not the restrictions contained herein can be extinguished. If the Department determines that the restrictions can be extinguished, an affidavit, attached to a copy of the Department's written determination, may be recorded to give notice that this deed restriction, or portions of this deed restriction, are no longer binding.

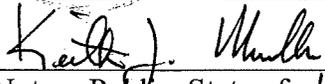
By signing this document, Paul F. Jadin asserts that he is duly authorized to sign this document on behalf of the City of Green Bay.

IN WITNESS WHEREOF, the owner of the property has executed this Declaration of Restrictions, this 21st day of June, 2000.

Signature: 
Printed Name: Paul F. Jadin
Title: Mayor



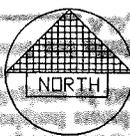
Subscribed and sworn to before me this 21st day of June, 2000.

 KEITH J. Mueller
Notary Public, State of Wisconsin
My commission 3/7/04

This document was drafted by the Wisconsin Department of Natural Resources based on information provided by Karl A. Schuldes, Robert E. Lee & Associates, Inc.

1759288

ENCLOSURE OF
[Illegible text]



LEGEND

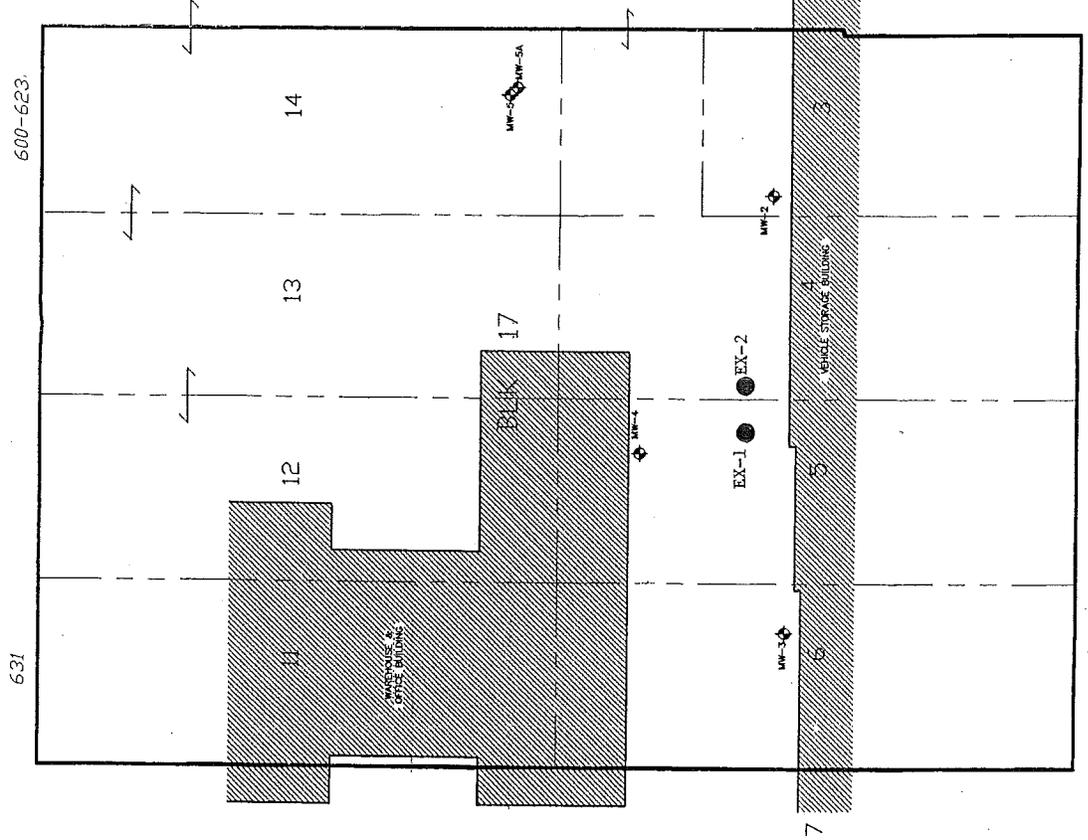


MONITORING WELL

E. MASON STREET

GREEN BAY WATER UTILITY
631 SOUTH ADAMS STREET
GREEN BAY, WISCONSIN

S ADAMS ST



CASS ST

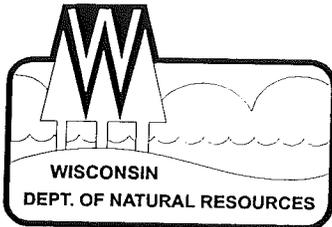
632
S JEFFERSON ST

624

618

614

FIGURE 1



State of Wisconsin \ DEPARTMENT OF NATURAL RESOURCES

Tommy G. Thompson, Governor
George E. Meyer, Secretary
Ronald W. Kazmierczak, Regional Director

Northeast Region Headquarters
1125 N. Military Ave., P.O. Box 10448
Green Bay, Wisconsin 54307-0448
Telephone 920-492-5800
FAX 920-492-5913
TDD 920-492-5912

August 26, 1999

Mr. Dave Wittig
Green Bay Water Utility
631 South Adams Street
Green Bay, Wisconsin 54301

Subject: Case Closure with Groundwater Use Restriction, Green Bay Water Utility, 631 South Adams Street, Green Bay, Wisconsin BRRTS # 03-05-000194
PECFA #: 54301-3799-31

Dear Mr. Wittig:

The Department's Case Closure Committee in the Northeast Region has reviewed the above case and has agreed to close it pending the filing of a groundwater use restriction. This groundwater use restriction will state that inaccessible groundwater contamination may remain at this site and that additional remedial action is not feasible at this time. The document would be placed in the file with the deed running with the property.

Only when the groundwater use restriction has been finalized and filed with Brown County can this site be closed. To expedite the completion of the deed restriction and closure process, the Department requests that you submit the following:

- a complete (unabbreviated) legal description of the property (this may be obtained from the Brown County Register of Deeds)
- a copy of the deed (this may be obtained from the Brown County Register of Deeds)
- available maps, such as a survey map, showing the property boundaries, building outlines, areas of remaining contamination, monitoring well/piezometer locations

Once these items have been submitted, the Department will send you a draft copy of the deed restriction containing language regarding the remaining petroleum contamination. If it is acceptable, please sign it and return a signed copy with proof of filing for our records. At that time, the site may be closed.

This groundwater use restriction is an option that the Department can offer in order to close this site. If you choose not to accept this option, you may perform additional investigation and cleanup of the remaining contamination. Within 14 days please submit a letter to the Department documenting your intentions.

If you have any additional relevant information that was not formerly provided to the Department, you should submit this information to the Department for reevaluation.

Mr. Dave Wittig
August 26, 1999
Page 2

If you have any questions, please contact me in Green Bay at 920-492-5861. The Department appreciates the action taken by the Green Bay Water Utility to remediate the contamination at this site.

Yours truly,

A handwritten signature in cursive script, appearing to read "Alan Thomas Nass".

Alan Thomas Nass, P.G.
Hydrogeologist

cc: James Caine, Robert E. Lee & Associates, 2825 South Webster Avenue, P.O. Box
2100, Green Bay, Wisconsin 54306-2100

Lot 4

No. 50. Wisconsin Deed-Short Form
(Rev. 7-17-70, Wis. Statutes)

STATE OF WISCONSIN
Form No. 2

Exempt from Sales Tax & Recording Tax

725691

Vol. 926 Page 312

This Indenture, Made by LAWRENCE E. DENEYS

grantor of BROWN County, Wisconsin, hereby conveys
and warrants to The City of Green Bay, a municipal corporation,

grantee of BROWN County, Wisconsin, for
the sum of \$ (16,800) SIXTEEN THOUSAND EIGHT HUNDRED & NO/100
the following tract of land in BROWN County, State of Wisconsin:

LOT 4, BLOCK 17, PLAT OF ASTOR, CITY OF GREEN
BAY, BROWN COUNTY, WISCONSIN. *****

FEE
77.25(2)
EXEMPT

REGISTRAR'S OFFICE
Brown County, Wis.

Received for record the 26th day
of April A. D. 1971 at
12 o'clock P. M. and recorded in
Vol. 926 of Records on page 312

Harold P. Losh
Registrar of Deeds

In Witness Whereof, the said grantor he hereunto set his hand and seal this
26 day of APRIL, A. D. 1971.

Signed and Sealed in Presence of

[Signature]
K. H. Sperhorn
[Signature]
Harold P. Losh

[Signature] (SEAL)
LAWRENCE E. DENEYS
____ (SEAL)
____ (SEAL)
____ (SEAL)

State of Wisconsin,
BROWN County, ss.

Personally came before me, this 26 day of APRIL, A. D. 1971,
the above named LAWRENCE E. DENEYS

to me known to be the person who executed the foregoing instrument, and acknowledged the same



[Signature]
Notary Public, BROWN County, Wis.
My commission expires 07-22 A. D. 1972

Drafted by LAWRENCE E. DENEYS, 1750 MID. AVE. GREEN BAY

IN WISCONSIN, all Deeds, Mortgages and other instruments to be recorded shall have a plain printed or typewritten name of the grantor, grantee, mortgagee and surety.

Lot 5

No. 94. Warranty deed - short form
(Form 151.12, W.S. Historical)

STATE OF WISCONSIN
Form No. 9

Published by the State Printer at the State Capitol, Madison, Wis.

725690

This Indenture, Made by LAWRENCE E. DENEYS

grantor, of BROWN County, Wisconsin, hereby conveys
and warrants to The City of Green Bay, a municipal corporation,

grantee, of BROWN County, Wisconsin, for
the sum of \$(15,600) Fifteen Thousand Six and NO/100
the following tract of land in BROWN County, State of Wisconsin:

LOT 5, BLOCK 17, PLAT OF ASTOR, CITY OF GREEN BAY, BROWN
COUNTY, STATE OF WISCONSIN. *****

FEE
77.25 (x)
EXEMPT

REGISTERS OFFICE
Brown County, Wis.

Received for record the 26th day
of April, A. D. 1971, at
2:00 o'clock P. M. and recorded in
Vol. 126 of Records on page 311

Harold P. Loh
Register of Deeds

In Witness Whereof, the said grantor has hereunto set HIS hand and seal this
26 day of APRIL, A. D. 1971

Signed and Sealed in Presence of

R. H. Sperberg
R. H. Sperberg
Naomi L. Moran
Naomi L. Moran

Lawrence E. Deneys (SEAL)
LAWRENCE E. DENEYS

(SEAL)

(SEAL)

(SEAL)

State of Wisconsin,
BROWN County, ss.

Personally came before me, this 26 day of APRIL, A. D. 1971
the above named LAWRENCE E. DENEYS

to me known to be the person who executed the foregoing instrument and acknowledged the same



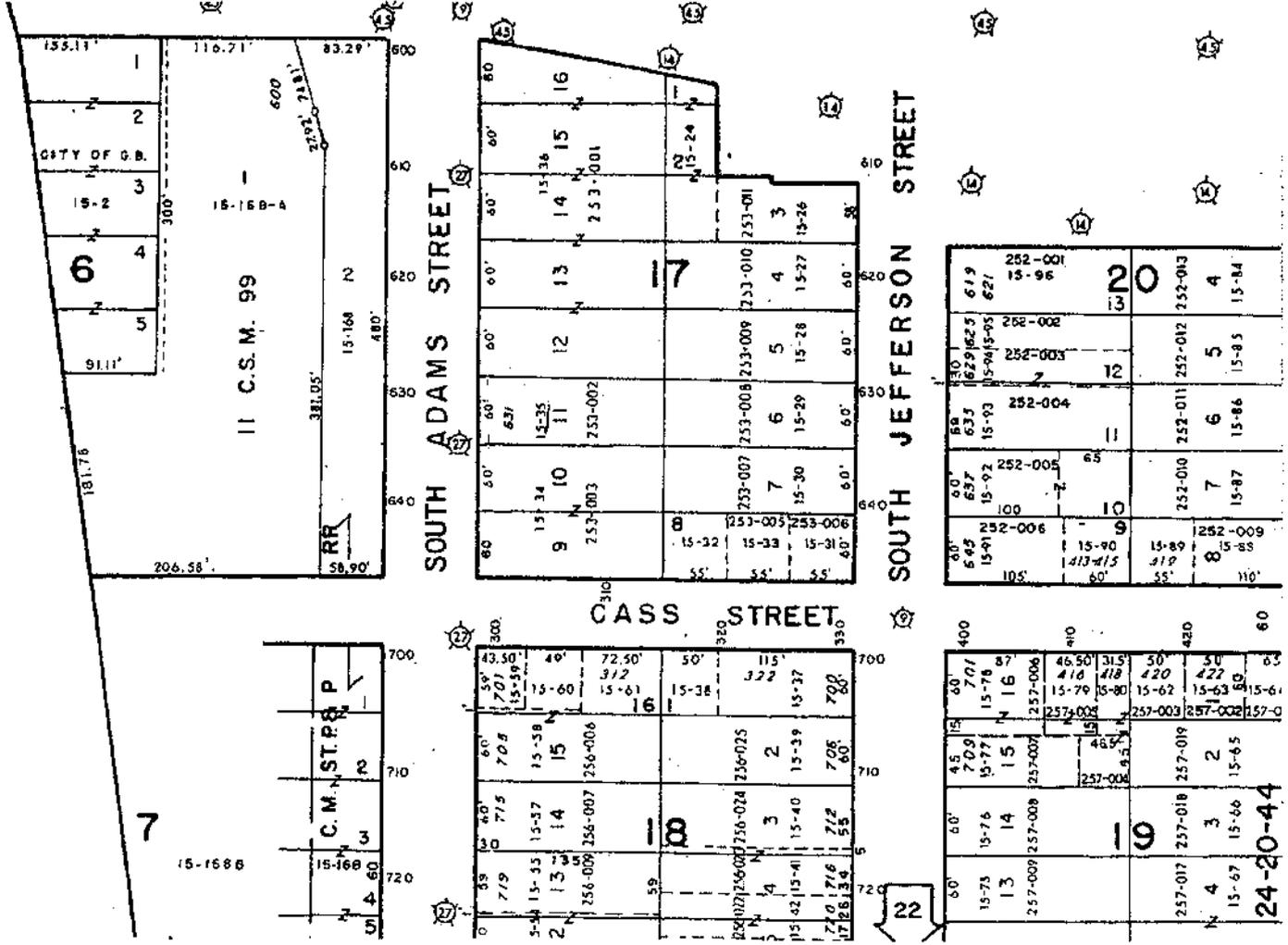
R. H. Sperberg
R. H. Sperberg
Notary Public, Green Bay, County, Wis.
My commission expires 12/31/72 A. D.

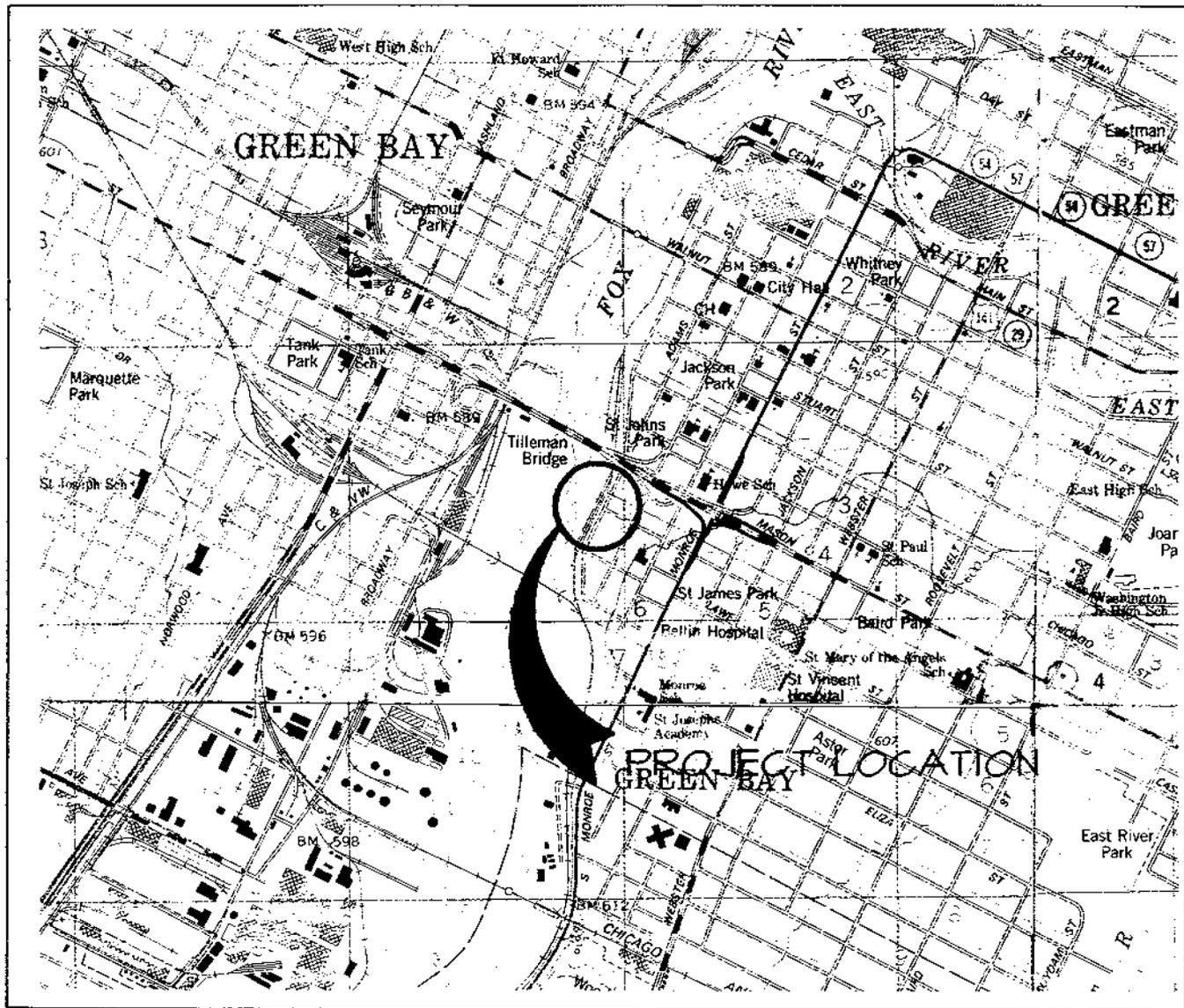
Witnessed by LAWRENCE E. DENEYS 1750 1/2th AVE GREEN BAY, WIS.

WV 926 REG 311

NOTICE: It is the policy of the State of Wisconsin to provide that all instruments to be recorded shall bear printed or facsimile thereon the name of the printer, printer's address and number.

OX RIVER





LOCATION MAP

GREEN BAY WATER UTILITY
 631 SOUTH ADAMS STREET
 GREEN BAY, WISCONSIN 54301



1" = 2000'

FIGURE 1

MAP USED - GREEN BAY WEST QUAD - 1482
 MAP USED - GREEN BAY EAST QUAD - 1482
 MAP USED - DE PERE QUAD - 1482
 MAP USED - BELLEVUE QUAD - 1482

Table 11 *During System Operation - Groundwater*
Groundwater Analytical Results

Parameter	NR 140 PAL	NR 140 ES	MW-2								
			06/30/94	12/16/94	03/30/95	07/13/95	12/22/95	01/24/96	03/27/96	07/08/96	10/11/96
GRO (µg/L)	--	--	70	<100	<100	NA	NA	NA	NA	NA	NA
DRO (µg/L)	--	--	190	170	<100	NA	NA	NA	NA	NA	NA
PVOCs (µg/L)											
Benzene <i>1900</i>	0.5	5	0.75	<1.0	<1.0	<1.0	<1.0	<0.2	<0.2	<0.2	<0.2
Ethylbenzene <i>7100</i>	140	700	1.2	<1.0	<1.0	<1.0	<1.0	<0.2	<0.2	<0.2	0.2
MTBE	12	60	<5.0	<1.0	<1.0	<1.0	<1.0	<0.2	<0.2	<0.2	<0.3
Toluene <i>20,000</i>	68.6	343	6.8	<1.0	2.5	<1.0	<1.0	<0.2	<0.2	<0.2	0.3
1,2,4-Trimethylbenzene			3.1	<1.0	<1.0	<1.0	<1.0	<0.3	<0.3	<0.2	<0.4
1,3,5-Trimethylbenzene <i>46</i>	--	<i>46</i>	1.0	<1.0	<1.0	<1.0	<1.0	<0.2	<0.2	<0.3	<0.3
Total Xylene <i>7800</i>	124	620	7.8	<1.0	<2.0	<2.0	<2.0	<0.4	<0.4	<0.3	0.4
PAHs (µg/L)											
Benzo(a)anthracene	--	--	0.015	0.059	<0.10	NA	<0.10	0.074	<0.027	0.16	<0.023
Benzo(a)pyrene	0.02	0.2	0.022	0.069	<0.10	NA	<0.10	<0.074	<0.074	0.13	<0.089
Benzo(b)fluoranthene <i>0.02</i>	<i>0.02</i>	<i>0.2</i>	0.031	0.11	<0.18	NA	<0.18	<0.055	<0.055	0.11	<0.099
Benzo(ghi) perylene	--	--	<0.060	0.13	<0.20	NA	<0.20	<0.071	<0.071	<0.12	<0.12
Benzo(k)fluoranthene	--	--	0.013	0.046	<0.10	NA	<0.10	<0.035	<0.035	<0.082	<0.082
Chrysene <i>0.02</i>	<i>0.02</i>	<i>0.2</i>	<0.050	0.087	<1.0	NA	<1.0	<0.36	<0.36	<0.075	<0.045
Fluoranthene <i>80</i>	<i>80</i>	<i>400</i>	<1.0	0.13	<2.0	NA	<2.0	0.18	<0.060	0.31	0.10
Indeno(1,2,3-cd)pyrene	--	--	<0.40	0.093	<0.10	NA	<0.10	<0.079	<0.079	0.13	<0.087
Phenanthrene	--	--	<0.30	0.090	<1.0	NA	<1.0	<0.33	<0.33	<0.10	<0.10
Pyrene <i>50</i>	<i>50</i>	<i>250</i>	<1.0	0.12	<1.0	NA	<1.0	<0.32	<0.32	0.18	<0.12

 Exceedance of NR 140 Groundwater Quality Preventive Action Limit (PAL)

 Exceedance of NR 140 Groundwater Quality Enforcement Standard (ES)

 *Comm 46 Table 1*

Table 11 cont. During System Operation - Groundwater
Groundwater Analytical Results

Parameter	NR 140 PAL	NR 140 ES	MW-3										
			06/30/94	12/16/94	03/30/95	07/13/95	12/22/95	01/24/96	03/27/96	07/08/96	10/11/96	9/30/97	
GRO (µg/L)	--	--	<50	<100	<100	NA	NA	NA	NA	NA	NA	NA	NA
DRO (µg/L)	--	--	360	140	<100	NA	NA	NA	NA	NA	NA	NA	NA
PVOCs (µg/L)													
Benzene <i>1500</i>	0.5	5	<0.5	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	<0.2	<0.2	<0.2	NA
Ethylbenzene <i>1100</i>	140	700	<0.50	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	<0.2	<0.2	0.3	NA
MTBE	12	60	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	<0.2	<0.3	<0.3	NA
Toluene <i>20,000</i>	68.6	343	3.0	<1.0	1.2	<1.0	<1.0	<1.0	<0.2	<0.2	<0.2	0.6	NA
1,2,4-Trimethylbenzene			1.2	<1.0	<1.0	<1.0	<1.0	<1.0	<0.3	<0.3	<0.4	<0.4	NA
1,3,5-Trimethylbenzene <i>46</i>	--	<i>46</i>	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	<0.2	<0.3	<0.3	NA
Total Xylene <i>1800</i>	124	620	3.1	<1.0	<2.0	<2.0	<2.0	<2.0	<0.4	<0.4	<0.3	<0.3	NA
PAHs (µg/L)													
Benzo(a)anthracene	--	--	<0.010	<0.012	<0.10	NA	<0.10	0.11	.073	0.31	<0.023	<0.06	<0.06
Benzo(a)pyrene	0.02	0.2	0.012	<0.014	<0.10	NA	<0.10	0.086	<0.074	0.23	<0.089	<0.06	<0.06
Benzo(b)fluoranthene <i>0.02</i>	<i>0.02</i>	<i>0.02</i>	<0.020	0.031	<0.18	NA	<0.18	0.089	0.10	0.23	<0.099	<0.03	<0.03
Benzo(ghi) perylene	--	--	0.11	0.088	<0.20	NA	<0.20	<0.071	<0.071	<0.12	0.27	<0.03	<0.03
Chrysene <i>0.02</i>	<i>0.02</i>	<i>0.02</i>	<0.050	0.025	<1.0	NA	<1.0	<0.36	<0.36	<0.075	<0.045	<0.05	<0.05
Fluoranthene <i>0.02</i>	<i>0.02</i>	<i>0.02</i>	<1.0	0.052	<2.0	NA	<2.0	0.44	<0.060	0.78	0.12	<0.06	<0.06
Indeno(1,2,3-cd)pyrene	--	--	<0.40	0.046	<0.10	NA	<0.10	0.094	<0.079	0.23	<0.087	<0.04	<0.04
Phenanthrene	--	--	<0.30	0.038	<1.0	NA	<1.0	<0.33	<0.33	0.36	<0.10	<0.05	<0.05
Pyrene <i>0.02</i>	<i>0.02</i>	<i>0.02</i>	<1.0	0.049	<1.0	NA	<1.0	<0.32	<0.32	0.46	<0.12	<0.08	<0.08

 Exceedance of NR 140 Groundwater Quality Preventive Action Limit (PAL)

 Exceedance of NR 140 Groundwater Quality Enforcement Standard (ES)

 *Column 46 Table 1*

Table // cont. During System Operation - Groundwater
Groundwater Analytical Results

Parameter	NR 140 PAL	NR 140 ES	MW-4										
			06/30/94	12/16/94	03/30/95	07/13/95	12/22/95	01/24/96	03/27/96	07/08/96	10/11/96	9/30/97	
GRO (µg/L)	--	--	<50	<100	<100	NA	NA	NA	NA	NA	NA	NA	NA
DRO (µg/L)	--	--	260	210	<100	NA	NA	NA	NA	NA	NA	NA	NA
PVOCs (µg/L)													
Benzene <i>1500</i>	0.5	5	0.54	<1.0	<1.0	<1.0	<1.0	<0.2	<0.2	<0.2	<0.2	<0.2	NA
Ethylbenzene <i>1100</i>	140	700	0.80	<1.0	<1.0	<1.0	<1.0	<0.2	<0.2	<0.2	<0.2	0.3	NA
MTBE	12	60	<5.0	<1.0	<1.0	<1.0	<1.0	<0.2	<0.2	<0.3	<0.3	<0.3	NA
Toluene <i>20,000</i>	68.6	343	3.5	<1.0	2.8	<1.0	<1.0	<0.2	<0.2	<0.2	<0.2	0.5	NA
1,2,4-Trimethylbenzene	<i>450</i>	<i>95</i>	1.8	<1.0	1.5	<1.0	<1.0	<0.3	<0.3	<0.4	<0.4	<0.4	NA
1,3,5-Trimethylbenzene	<i>450</i>	<i>60</i>	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	<0.2	<0.3	<0.3	<0.3	NA
Total Xylene <i>2,200</i>	124	620	4.4	<1.0	3.6	<2.0	<2.0	<0.4	<0.4	<0.3	<0.3	<0.3	NA
PAHs (µg/L)													
Anthracene	--	--	<0.20	0.057	<1.0	NA	<1.0	<0.32	<0.32	<0.22	<0.22	<0.22	<0.03
Benzo(a)anthracene	--	--	0.25	<0.012	<0.10	NA	<0.10	<0.27	0.10	0.28	0.15	0.15	<0.06
Benzo(a)pyrene	0.02	0.2	0.27	<0.014	<0.10	NA	<0.10	<0.074	0.11	0.28	0.25	0.25	<0.06
Benzo(b)fluoranthene	<i>0.02</i>	<i>0.2</i>	0.41	0.24	<0.18	NA	<0.18	<0.055	0.13	0.26	0.20	0.20	<0.03
Benzo(ghi)perylene	--	--	0.28	0.44	<0.20	NA	<0.20	0.42	0.72	<0.12	<0.12	<0.12	<0.05
Benzo(k)fluoranthene	--	--	0.18	<0.0084	<0.10	NA	<0.10	<0.035	<0.035	<0.082	<0.082	<0.082	<0.03
Chrysene	<i>0.02</i>	<i>0.2</i>	0.34	0.23	<1.0	NA	<1.0	<0.36	<0.36	<0.075	0.15	0.15	<0.05
Dibenzo(a,h)anthracene			0.094	<0.014	<0.20	NA	<0.20	<0.35	<0.35	<0.23	<0.23	<0.23	<0.06
Fluoranthene	<i>50</i>	<i>400</i>	1.0	0.43	<2.0	NA	<2.0	<0.060	0.36	0.63	0.67	0.67	<0.04
Indeno(1,2,3-cd)pyrene	--	--	<0.40	0.22	<0.10	NA	<0.10	0.12	0.23	0.41	0.37	0.37	<0.04
Phenanthrene	--	--	0.35	0.35	<1.0	NA	<1.0	<0.33	<0.33	0.18	0.21	0.21	<0.05
Pyrene	<i>50</i>	<i>250</i>	<1.0	0.33	<1.0	NA	<1.0	<0.32	<0.32	0.34	0.26	0.26	<0.08

 Exceedance of NR 140 Groundwater Quality Preventive Action Limit (PAL)

 Exceedance of NR 140 Groundwater Quality Enforcement Standard (ES)

 *Comm 46 Table 1*

Table 11 cont. During System Operation - Groundwater
Groundwater Analytical Results

Parameter	NR 140 PAL	NR 140 ES	MW-5										
			06/30/94	12/16/94	03/30/95	07/13/95	12/22/95	01/24/96	03/27/96	07/08/96	10/11/96	9/30/97	
GRO (µg/L)	--	--	<50	<100	<100	NA	NA	NA	NA	NA	NA	NA	NA
DRO (µg/L)	--	--	<100	190	<100	NA	NA	NA	NA	NA	NA	NA	NA
PVOCs (µg/L)													
Benzene <i>1500</i>	0.5	5	<0.5	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	<0.2	<0.2	<0.2	NA
Ethylbenzene <i>7100</i>	140	700	0.56	<1.0	<1.0	<1.0	<1.0	<1.0	<0.3	<0.2	<0.2	0.3	NA
MTBE	12	60	<5.0	<1.0	2.0	2.8	1.6	1.3	0.30	0.30	2.7	2.6	NA
Toluene <i>20000</i>	68.6	343	4.2	<1.0	4.7	1.2	<1.0	<1.0	<0.2	<0.2	0.2	0.9	NA
1,2,4-Trimethylbenzene			1.2	<1.0	1.0	<1.0	<1.0	<1.0	<0.3	<0.3	<0.4	<0.4	NA
1,3,5-Trimethylbenzene <i>450</i>			<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	<0.2	<0.3	<0.3	NA
Total Xylene <i>7500</i>	124	620	3.4	<1.0	4.3	<2.0	<2.0	<2.0	<0.4	<0.4	<0.3	<0.3	NA
PAHs (µg/L)													
Benzo(ghi) perylene	--	--	0.062	<0.032	<0.20	NA	<0.20	<0.071	<0.071	<0.12	<0.12	<0.12	<0.05
Fluoranthene <i>90</i>		<i>420</i>	<1.0	<0.030	<2.0	NA	<2.0	0.089	<0.060	0.097	<0.030	<0.030	<0.04
Indeno(1,2,3-cd)pyrene	--	--	<0.40	0.026	<0.10	NA	<0.10	<0.079	<0.079	<0.087	<0.087	<0.087	<0.04
Pyrene <i>70</i>		<i>250</i>	<1.0	0.022	<1.0	NA	<1.0	<0.32	<0.32	<0.12	<0.12	<0.12	<0.08

 Exceedance of NR 140 Groundwater Quality Preventive Action Limit (PAL)

 Exceedance of NR 140 Groundwater Quality Enforcement Standard (ES)

 *Comm 46 Table 1*

Gnd

Table 11 cont. During System operation - water
Groundwater Analytical Results

Parameter	NR 140 PAL	NR 140 ES	MW-5A									
			6/30/94	03/30/95	07/13/95	12/22/95	01/24/96	03/27/96	07/08/96	10/11/96	9/30/97	
GRO (µg/L)	--	--	<50	<100	NA	NA	NA	NA	NA	NA	NA	NA
DRO (µg/L)	--	--	<100	<100	NA	NA	NA	NA	NA	NA	NA	NA
PVOCs (µg/L)												
Benzene <i>1500</i>	0.5	5	<0.5	<1.0	<1.0	<1.0	<0.2	<0.2	<0.2	<0.2	<0.2	NA
Ethylbenzene <i>7100</i>	140	700	<0.5	<1.0	<1.0	<1.0	<0.2	<0.2	<0.2	<0.2	0.3	NA
MTBE	12	60	<5.0	<1.0	<1.0	<1.0	<0.2	<0.2	<0.2	<0.3	<0.3	NA
Toluene <i>20000</i>	68.6	343	1.3	<1.0	<1.0	<1.0	<0.2	<0.2	0.2	0.2	0.7	NA
1,2,4-Trimethylbenzene	<i>450</i>	<i>96</i>	<1.0	<1.0	<1.0	<1.0	<0.3	<0.3	<0.4	<0.4	<0.4	NA
1,3,5-Trimethylbenzene	<i>450</i>	<i>96</i>	<1.0	<1.0	<1.0	<1.0	<0.2	<0.2	<0.3	<0.3	<0.3	NA
Total Xylene <i>1800</i>	124	620	0.98	<2.0	<2.0	<2.0	<0.4	<0.4	<0.3	<0.3	<0.3	NA
PAHs (µg/L)												
Benzo(a)anthracene	--	--	<0.010	<0.10	NA	<0.10	0.076	0.19	0.095	0.18	0.15	<0.06
Benzo(a)pyrene	0.02	0.2	<0.010	<0.10	NA	<0.10	<0.074	0.14	0.10	0.15	0.15	<0.06
Benzo(b)fluoranthene	<i>0.02</i>	<i>0.2</i>	<0.020	<0.18	NA	<0.18	0.060	0.16	<0.099	0.15	0.15	0.121
Benzo(g,h,i)perylene	--	--	<0.010	<0.10	NA	<0.10	<0.035	<0.035	<0.082	0.15	0.15	<0.03
Chrysene	<i>0.02</i>	<i>0.2</i>	<0.050	<1.0	NA	<1.0	<0.36	<0.36	<0.075	0.073	0.073	0.050
Fluoranthene	<i>80</i>	<i>400</i>	<1.0	<2.0	NA	<2.0	0.18	1.0	0.24	0.43	0.43	<0.04
Indeno(1,2,3-cd)pyrene	--	--	<0.40	<0.10	NA	<0.10	<0.079	0.13	<0.087	0.10	0.10	<0.04

 Exceedance of NR 140 Groundwater Quality Preventive Action Limit (PAL)

 Exceedance of NR 140 Groundwater Quality Enforcement Standard (ES)

 *Comm 46 Table 1*

TABLE 12
Groundwater Analysis-Post Remediation

May 27, 1998

Parameter	ES	PAL	MW-2	MW-3	MW-4	MW-5	MW-5A
PVOCs							
Benzene <i>1500</i>	5	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene <i>7100</i>	700	140	<1.0	<1.0	<1.0	<1.0	<1.0
MTBE <i>60</i>	<i>12</i>	<i>12</i>	<1.0	<1.0	<1.0	<1.0	<1.0
Toluene <i>20000</i>	343	68.6	<1.0	<1.0	<1.0	<1.0	<1.0
1,2,4-Trimethylbenzene			<1.0	<1.0	<1.0	<1.0	<1.0
1,3,5-Trimethylbenzene <i>480</i>	<i>96</i>	<i>96</i>	<1.0	<1.0	<1.0	<1.0	<1.0
total Xylene <i>1800</i>	620	124	<1.0	<1.0	<1.0	<1.0	<1.0
PAHs							
Benzo(b)fluoranthene	<i>0.2</i>	<i>0.2</i>	<0.06	<0.03	0.031	<0.03	<0.03
Benzo(ghi)perylene	-	-	<0.1	<0.05	0.142	<0.05	<0.05



➤ Exceedance of NR 140 Groundwater Quality Enforcement Standard (ES)



➤ Exceedance of NR 140 Groundwater Quality Preventive Action Limit (PAL)



➤ *Concur 46 Table 1*

TABLE 13
Groundwater Analysis in Extraction Wells
Before and After Remedial Action

Pre Post Post Pre Post Post

Parameter	ES	PAL	EX-1			EX-2		
			8/22/91	5/27/98	7/10/98	8/22/91	6/1/98	7/10/98
PVOCs								
Benzene <i>1500</i>	5	0.5	2,600	<0.5	<0.5	5,500	313	155
Ethylbenzene <i>7100</i>	700	140	2,700	<1.0	<1.0	1,600	145	94.6
MTBE	60	12	NA	<1.0	<1.0	NA	<10.0	<1.0
Naphthalene	40	8	1,200	NA	NA	450	NA	NA
Toluene <i>20000</i>	343	68.6	10,000	<1.0	<1.0	12,000	55.8	108
1,2,4-Trimethylbenzene			4,100	<1.0	<1.0	1,700	119	22.6
1,3,5-Trimethylbenzene	<i>400</i>	<i>96</i>	1,200	<1.0	<1.0	450	<10.0	1.40
total Xylene <i>7800</i>	620	124	6,000	<1.0	<1.0	4,800	127.4	135.4
PAHs								
Benzo(a)anthracene	-	-	NA	0.742	0.306	NA	<0.06	<0.06
Benzo(a)pyrene	0.2	0.02	NA	3.14	1.64	NA	1.82	0.153
Benzo(b)fluoranthene	<i>0.2</i>	<i>0.02</i>	NA	4.97	2.08	NA	3.18	0.283
Benzo(k)fluoranthene	-	-	NA	1.45	0.619	NA	0.922	0.112
Benzo(ghi)perylene	-	-	NA	3.90	1.98	NA	3.07	0.255
Chrysene	<i>0.2</i>	<i>0.02</i>	NA	2.31	0.984	NA	1.48	<0.04
Fluoranthene	<i>80</i>	<i>400</i>	NA	4.30	3.51	NA	3.15	<0.04
Indeno(1,2,3-cd) pyrene	-	-	NA	4.13	2.29	NA	3.26	0.248
Naphthalene	40	8	NA	<0.05	<0.05	NA	3.42	7.85
Phenanthrene	-	-	NA	1.96	0.931	NA	1.36	<0.08
Pyrene	<i>30</i>	<i>250</i>	NA	2.99	2.43	NA	2.20	<0.17

NA = Not analyzed

 Exceedance of NR 140 Groundwater Quality Enforcement Standard (ES)

 Exceedance of NR 140 Groundwater Quality Preventive Action Limit (PAL)

 *Comply 46 Table 1*

Table 19
Groundwater Elevations

MW1-588.61

Well	PVC Elevation	03/02/90		03/05/90		03/15/90		03/22/90		04/12/90		04/24/92	
		Water Depth	Water Elevation										
MW-2	591.47	16.10	575.37	15.07	576.40	12.43	579.04	5.21	586.26	5.25	586.22	4.77	586.70
MW-3	592.28	6.95	585.33	6.90	585.38	6.07	586.21	5.98	586.30	5.87	586.41	4.66	587.62
MW-4	591.39	18.61	572.78	17.53	573.86	12.70	578.69	5.25	586.14	5.26	586.13	5.22	586.17
MW-5	591.04	NA	NA	6.37	584.67								
MW-5A	590.78	NA	NA	24.53	566.25								

Well	PVC Elevation	06/08/92		07/20/92		06/30/94		12/16/94		03/29/95		07/13/95	
		Water Depth	Water Elevation										
MW-2	591.47	—*	—*	—*	—*	4.62	586.85	5.28	586.19	4.64	586.83	4.91	586.56
MW-3	592.28	4.25	588.03	5.37	586.91	4.73	587.55	5.36	586.92	4.85	587.43	5.13	587.15
MW-4	591.39	4.98	587.30	5.53	585.86	4.31	587.08	5.97	585.42	5.90	585.49	5.72	585.67
MW-5	591.04	6.66	584.38	7.16	583.88	6.56	584.48	6.98	584.06	6.58	584.46	6.67	584.37
MW-5A	590.78	24.53	566.25	19.91	570.87	15.27	575.51	13.43	577.35	17.47	573.31	15.94	574.84

Well	PVC Elevation	12/22/95		01/24/96		03/27/96		07/08/96		10/11/96	
		Water Depth	Water Elevation								
MW-2	591.47	5.52	585.95	5.87	585.60	6.20	585.27	4.52	586.95	4.67	586.80
MW-3	592.28	5.80	586.48	6.10	586.18	5.21	587.07	4.22	588.06	5.03	587.25
MW-4	591.39	6.42	584.97	7.53	583.86	6.73	584.66	4.48	586.91	4.75	586.64
MW-5	591.04	7.13	583.91	7.17	583.87	6.78	584.26	6.28	584.76	6.82	584.22
MW-5A	590.78	13.39	577.39	25.04	565.74	20.89	569.89	17.76	573.02	17.07	573.71

NA = Not Applicable
* = Inaccessible