### GIS REGISTRY (Cover Sheet) Form 4400-280 (R 7/12)

Source Pro	perty li	nform	ation			CLOSURE DAT	E: Jul 21, 2011				
BRRTS #:	02-58-0	00049	(No Dashes)								
ACTIVITY NAME:	NORTHER	N LAKES C	:OOP			FID #:	NA				
PROPERTY ADDRESS						DATCP #:	NA				
			TRAIL ND			PECFA#:	NA				
MUNICIPALITY:	HAYWARE	)									
PARCEL ID #:	57-010-2-4	11-09-26-1	04-000-000030	)							
	*WTM	COORDIN	NATES:		WTM COORDINAT	ES REPRESENT:					
	X: <b>40761</b>	<b>6</b> Y:	615619	•	Approximate Center Of	Contaminant Sou	rce				
		oordinates d 83, NAD83		0	Approximate Source Pa	rcel Center					
Please check as app	ropriate: (Bl	RRTS Actio	on Code)								
			Conta	aminated	l Media:						
⊠ <u>G</u> r	oundwater (	Contamina	ntion > ES (236)		Soil Contamination     Soil Contamin	ion > *RCL or **SS	RCL (232)				
	Contamin	ation in RO	OW			tion in ROW					
	✓ Off-Source	Contami	nation		✓ Off-Source Contamination  (note: for list of off-source properties see "Impacted Off-Source Property" form)						
	<b>note:</b> for list of se "Impacted O										
			Contin	uing Obl	igations:						
Г	N/A (Not A	pplicable)			Cover or B	arrier <i>(222)</i>					
	Soil: main	tain indus	trial zoning (220	0)	( <b>note:</b> maintend groundwater or d						
,	<b>note:</b> soil conte etween non-ine		concentrations l industrial levels)			gation <i>(226)</i>					
	Structural	Impedime	ent <i>(224)</i>		☐ Maintain L	iability Exemption	(230)				
	Site Specif	ic Conditi	on <i>(228)</i>			ernment unit or econ rporation was directe action )					
l <b>ote:</b> Comments will not	t print out.		Мо	nitoring	Wells:						
		Are all m	nonitoring wells	properly ab	oandoned per NR 141? (2	234)					
			Yes	○ No	○ N/A						
						* Residual Contarr **Site Specific Resi	ninant Level dual Contaminant Leve				

State of Wisconsin
Department of Natural Resources
http://dnr.wi.gov

#### PLEASE ASSEMBLE IN THIS ORDER

#### **GIS Registry Checklist**

Form 4400-245 (R 8/11

Page 1 of 3

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 #:	02-58-000049	(No Dashes)	PARCEL ID #:	57-010-2-41-09-26-1 04-000-0	00030	
ACTIVITY NAME:	NORTHERN LAK	ES COOP		WTM COORDINATES:	X: 407616	Y: 615619
<b>CLOSURE DOCU</b>	<b>JMENTS</b> (the D	epartment adds thes	e items to the f	inal GIS packet for posting o	on the Registry)	
Continuing C	Plan (if activity in the Plan (if activity in Plan			dition (land use control) under s. y residual contamination and/		
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: Sawyer County Certified Survey Map & Portion of Plat Map Sawyer County
- 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: USGS Regional 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 #: 2 Title: Site Details Map
- 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 #: 4 Title: Map of Soil Remediation

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GIS Registry Checklist
Form 4400-245 (R 8/11) Page 2 of 3

BRRTS #: 02-58-000049 ACTIVITY NAME: NORTHERN LAKES COOP

#### 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 #: 8 Title: Sections A-A' & B-B'

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 #: 6a & 6b Title: Benzene Isoconcentration Map & Total Trimethylbenzene Isoconcentration Map (Aug 2009)

**Groundwater Flow Direction Map:** A map that represents groundwater movement at the site. If the flow direction varies by more then 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

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  $\underline{\text{must not}}$  contain shading and/or cross-hatching. The use of **BOLD** or *ITALICS* is acceptable.

**Soil Analytical Table:** A table showing <u>remaining</u> 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 #: 1 Title: Soil Sample Results Summary Table

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

Table #: 3 Title: Ground Water Analytical Results

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 #: 4 Title: Ground Water Elevations

#### **IMPROPERLY ABANDONED MONITORING WELLS**

For each monitoring well <u>not</u> 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.

X No	t App	licable
------	-------	---------

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).

State of Wisconsin	GIS Registry	/ Checklist	
Department of Natural Resources	Form 4400-245		Page 3 of 3
http://dnr.wi.gov	1 01111 4400 243	(11 0/11)	rage 5 or 5

BRRTS #: 02-58-000049 ACTIVITY NAME: NORTHERN LAKES COOP

#### **NOTIFICATIONS**

#### **Source Property**

**X** 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: Sawyer County Certified Survey Map

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: 2

State of Wisconsin	Imported Off Course Drangety Information
Department of Natural Resources http://dnr.wi.gov	Impacted Off-Source Property Information Form 4400-246 (R 3/08)

This fillable form is intended to provide a list of information that must be submitted for evaluation for case closure. It is to be used in conjunction with Form 4400-202, Case Closure Request (Section H). 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	#:	02-58-000049			
ACTIV	ITY NAME:	NORTHERN LAKES COOP			
ID		Off-Source Property Address	Parcel Number	WTM X	WTM Y
Α	15212 C	Chippewa Trail, Hayward, WI 54843 (Kretschmer Property)	57-010-2-41-09-26-1 03-000-000010	407556	615603
В	No Phys	sical Address - American Birkebiner Ski Foundation Property	57-010-2-41-09-26-1 03-000-000020	407595	615634
С	15216 C	Chippewa Trail, Hayward, WI 54843 (Sawyer County Property)	57-010-2-41-09-26-1 03-000-000150	407521	615603
D					
E					
F					
G					
Н					
I					

State of Wisconsin
DEPARTMENT OF NATURAL RESOURCES
Northern Region Headquarters
810 W. Maple Street
Spooner WI 54801

FILE

Scott Walker, Governor Cathy Stepp, Secretary John Gozdzialski, Regional Director Telephone 715-635-2101 FAX 715-635-4105 TTY Access via relay - 711



July 21, 2011

Mr. Mike Covelli Northern Lakes Cooperative PO Box 985 Hayward, WI 54843-0985

SUBJECT:

Final Case Closure

Northern Lakes Cooperative Bulk Plant, Hayward, WI

WDNR BRRTS Activity #: 02-58-000049

Dear Mr. Covelli:

On April 29, 2011, the Northern Region Closure Committee reviewed your request for closure of the case described above. The Northern Region Closure Committee reviews environmental remediation cases for compliance with state rules and statutes to maintain consistency in the closure of these cases. On May 3, 2011, you were notified that the Closure Committee had granted conditional closure to this case.

On June 15, 2011 the Department received monitoring well abandonment forms indicating that you have complied with the requirements for final closure.

Based on the correspondence and data provided, it appears that your case meets the closure requirements in ch. NR 726, Wisconsin Administrative Code. The Department considers this case closed and no further investigation or remediation is required at this time.

#### **GIS Registry**

The conditions of case closure set out below in this letter require that this site be listed on the Remediation and Redevelopment Program's GIS Registry. The specific reasons are summarized below:

- Residual soil contamination exists that must be properly managed should it be excavated or removed
- Groundwater contamination is present above Chapter NR 140 enforcement standards

This letter and information that was submitted with your closure request application will be included on the GIS Registry. To review the sites on the GIS Registry web page, visit the RR Sites Map page at: <a href="http://dnr.wi.gov/org/aw/rr/gis/index.htm">http://dnr.wi.gov/org/aw/rr/gis/index.htm</a>. If the property is listed on the GIS Registry because of remaining contamination and you intend to construct or reconstruct a well, you will need prior Department approval in accordance with s. NR 812.09(4) (w), Wis. Adm. Code. To obtain approval,



Form 3300-254 needs to be completed and submitted to the DNR Drinking and Groundwater program's regional water supply specialist. This form can be obtained on-line <a href="http://dnr.wi.gov/org/water/dwg/3300254.pdf">http://dnr.wi.gov/org/water/dwg/3300254.pdf</a> or at the web address listed above for the GIS Registry.

#### Residual Soil Contamination

Residual soil contamination remains at the loading dock to the west to the property boundary as shown on the attached map and in the information submitted to the Department of Natural Resources. If soil in the specific locations described above is excavated in the future, then pursuant to ch. NR 718 or, if applicable, ch. 289, Stats., and chs. 500 to 536, the property owner at the time of excavation must sample and analyze the excavated soil to determine if residual contamination remains. If sampling confirms that contamination is present the property owner at the time of excavation will need to determine whether the material is considered solid or hazardous waste and ensure that any storage, treatment or disposal is in compliance with applicable standards and rules. In addition, all current and future owners and occupants of the property need to be aware that excavation of the contaminated soil may pose an inhalation or other direct contact hazard and as a result special precautions may need to be taken to prevent a direct contact health threat to humans.

#### Residual Groundwater Contamination

Groundwater impacted by petroleum contamination greater than enforcement standards set forth in ch. NR140, Wis. Adm. Code, is present both on this contaminated property and on the adjacent properties to the west, as shown on the attached map. Off-source property owners have also been notified of the presence of groundwater contamination.

#### **Dewatering Permits**

The Department's Watershed Management Program regulates point source discharges of contaminated water, including discharges to surface waters, storm sewers, pits or to the ground surface. This includes discharges from construction related dewatering activities, including utility and building construction.

Based on the concentrations of contaminants remaining in groundwater at this location, it appears likely that dewatering activities would require a permit from the Watershed Management Program. If you or any other person plan to conduct such activities, you or that person must contact that program, and if necessary, apply for the necessary discharge permit. Additional information regarding discharge permits is available at <a href="http://www.dnr.state.wi.us/org/water/wm/ww/">http://www.dnr.state.wi.us/org/water/wm/ww/</a>

#### PECFA Reimbursement

Section 101.143, Wis. Stats., requires that PECFA claimants seeking reimbursement of interest costs, for sites with petroleum contamination, submit a final reimbursement claim within 120 days after they receive a closure letter on their site. For claims not received by the PECFA Program within 120 days of the date of this letter, interest costs after 60 days of the date of this letter will not be eligible for PECFA reimbursement. If there is equipment purchased with PECFA funds remaining at the site, contact the Commerce PECFA Program to determine the method for salvaging the equipment.

Please be aware that the case may be reopened pursuant to s. NR 726.09, Wis. Adm. Code, if additional information regarding site conditions indicates that contamination on or from the site poses a threat to public health, safety, or welfare or to the environment.

The Department appreciates your efforts to restore the environment at this site. If you have any questions regarding this closure decision or anything outlined in this letter, please contact Jamie Dunn at 715, 635-4049.

Singerely

Jamie Dunn Hydrogeologist

Northern Region Remediation & Redevelopment Program

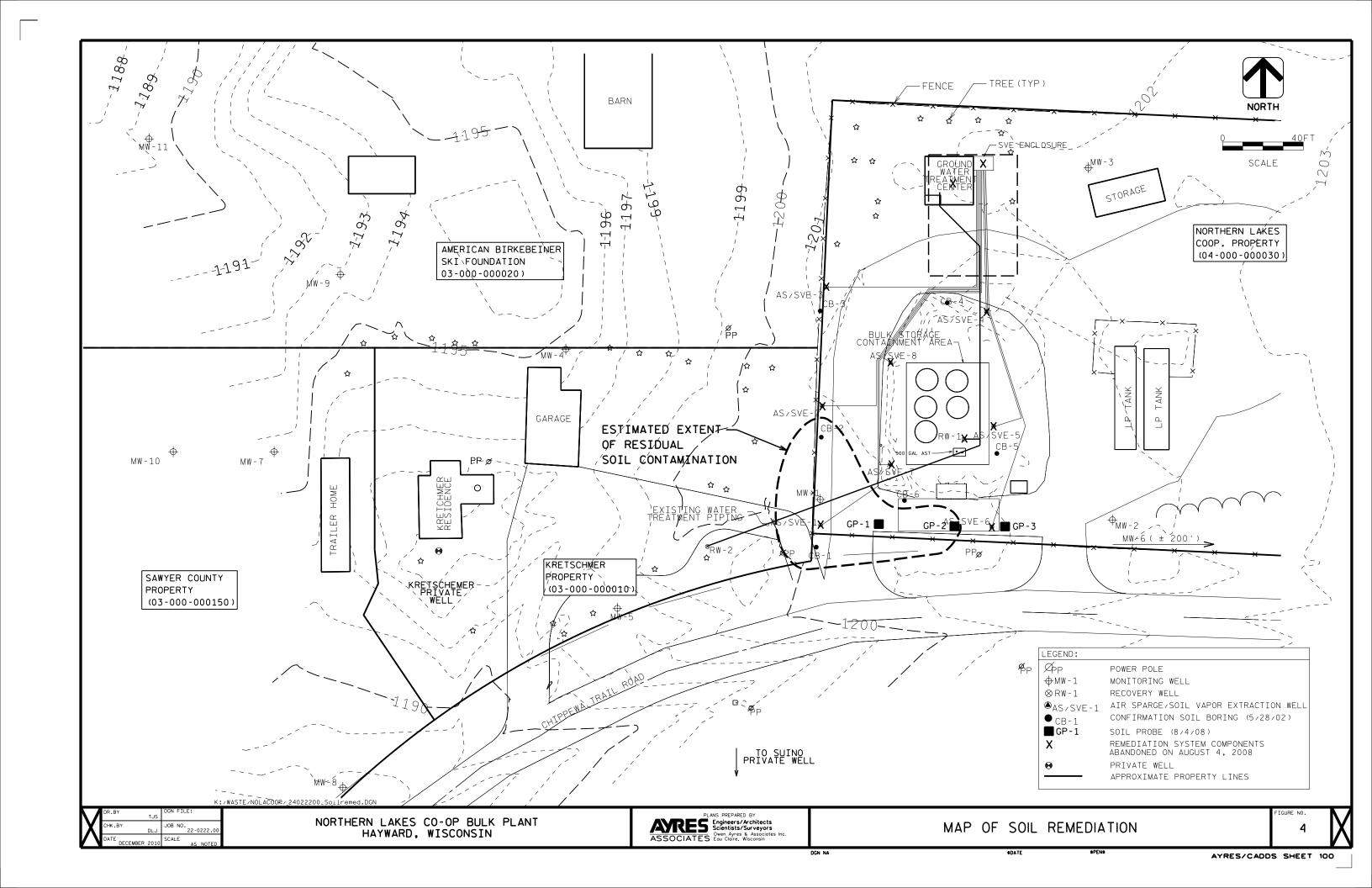
Attach: Maps

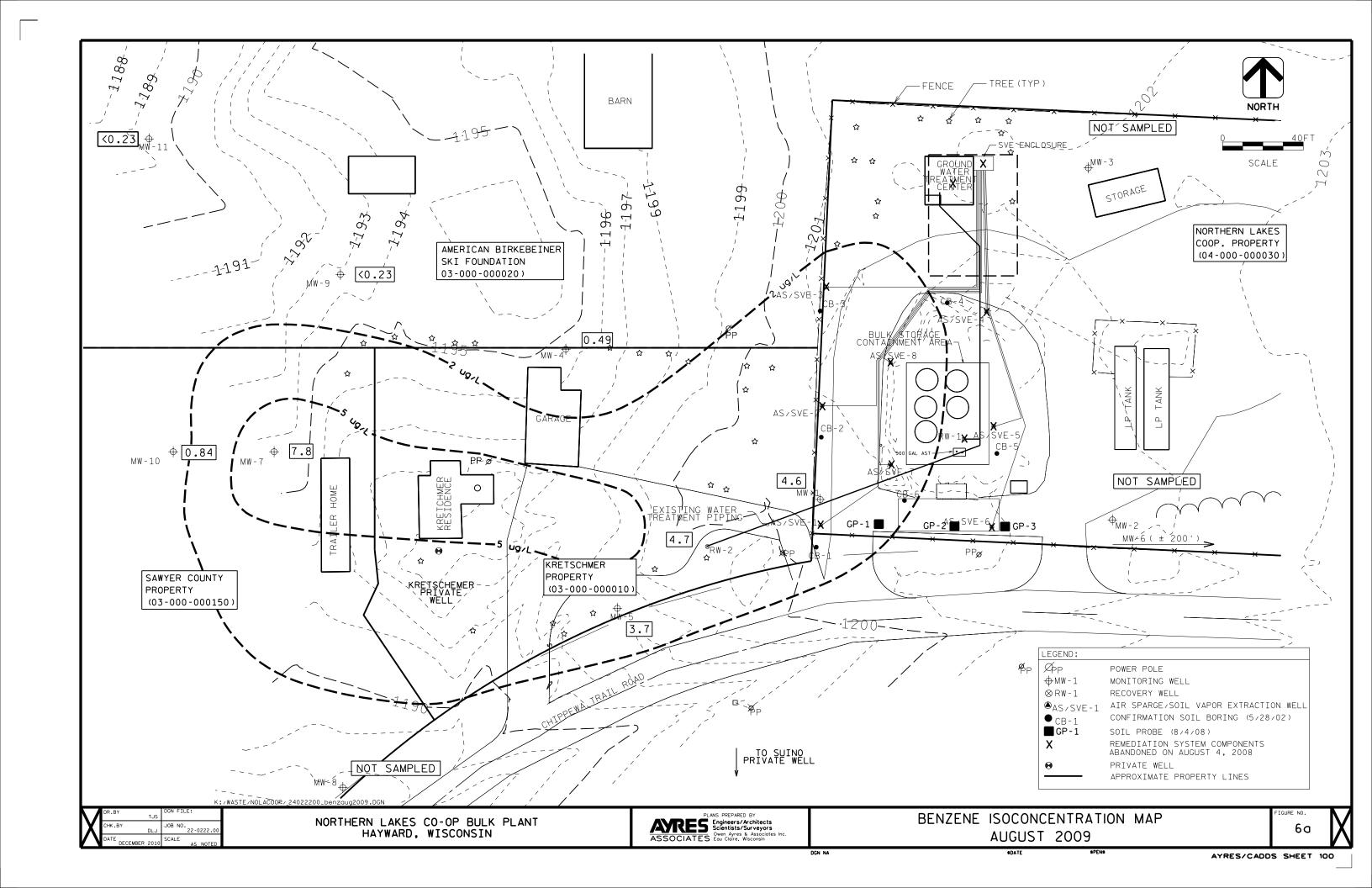
cc: Meg Overocker, Ayres Associates, 3433 Oakwood Hills Parkway, Eau Claire, WI 54701-3161

Town of Hayward, 15460 West STH 77 East, Hayward, WI 54843

Sawyer County Clerk, Sawyer County Courthouse, 10610 Main St., Hayward, WI, 54843

Mr. Ronald Kretschmer, 15212 Chippewa Trail, Hayward, WI 54843





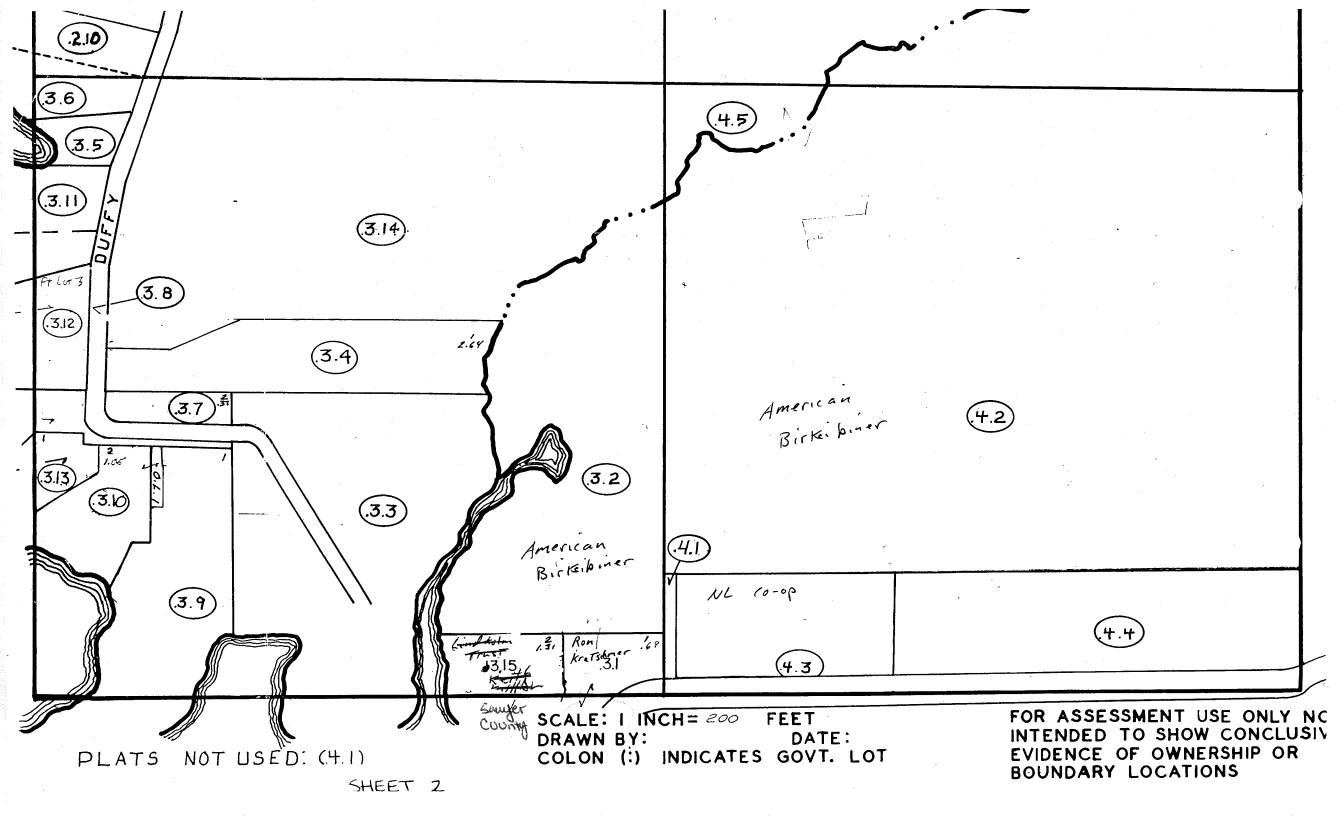
STATE OF WISCONSIN-FORM 9 THIS SPACE RESERVED FOR RECORDING DATA 128425 Register's Office Sawyer County eceived for record the 17th day of THIS INDENTURE, Made by Russell A. Hamblin and Norma E. August AD 1967 at 10 o'clock A M and recorded in vol. Hamblin, his wife and Egbert D. Fullington and of Records on page 1268 Elizabeth M. Fullington, his wife grantor s Register County, Wisconsin, hereby conveys and warrants to Deputy Northern Lakes Cooperative RETURN TO \$1.00 and other valuable considerations the following tract of land in Sawyer County, State of Wisconsin: The East 450 feet of the West 470 feet of the South 250 feet of the Southeast quarter of the Northeast quarter (SE4 NE4), Section Twenty-six (26), Township Forty-one (41) North, Range Nine (9) West. Subject to existing highway right of way, easements and reservations of record. Grantees agree that they will keep said premises in a neat and orderly manner, and comply with all laws and ordinances regarding the same. (IF NECESSARY, CONTINUE DESCRIPTION ON REVERSE SIDE) In Witness Whereof, the said grantor S have hereunto set their hands and seal this 4th day of August, A. D., 19, 67. .....(SEAL) Hamblin SIGNED AND SEALED IN PRESENCE OF complia .....(SEAL) Norma E. Hamblin .....(SEAL) Ralph L. Peters (SEAL) Elizabeth M. Fullington State of Wisconsin, Sawyer Sawyer County. Personally came before me, this 4th day of August A.D., 19 67 the above named Russell A. Hamblin and Norma E. Hamblin, his wife, Egbert D. Fullington and Elizabeth M. Fullington, his wife. August , A.D., 19 67, 

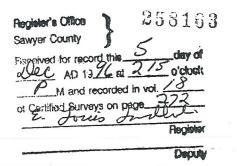
o Lalph L. Peters

Notary Public, Sawyer County, Wis. My commission (expires) [S] Sept - 21, 1969

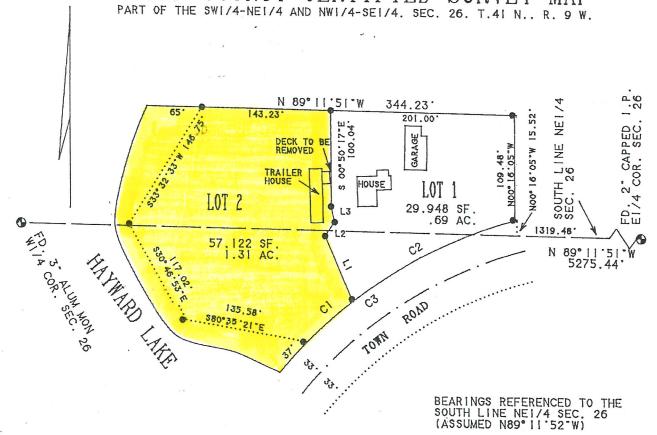
THIS INSTRUMENT WAS DRAFTED BY

T. W. Duffy





N SAWYER COUNTY CERTIFIED SURVEY MAP



SET 3/4" X 24" REROD.
 WT. 1.50 LBS/FT.

SCALE 1" - 100

LI N24°06'46'W 72.67' L2 N35°05'01'E 17.17' L3 N06°52'10'W 16.88'

	RAD.	TAN.	ARC,	CHD.	CHD. BRG.	DELTA
C2 !	518.74°	35.49°	70.87°	70.81°	N49° 39'01'E	07° 49 '39"
	518.74°	100.52°	198.58°	197.37°	N64° 31'52'E	21° 56 '01"
	518.74°	137.84°	269.45°	266.43°	N60° 37'02'E	29° 45 '40"

1. LYLE L. ELLIOTT. REGISTERED LAND SURVEYOR S-1300 DO HEREBY CERTIFY THAT TO THE BEST OF MY KNOWLEDGE AND BELIEF. THIS PLAT IS A TRUE AND CORRECT REPRESENTATION OF THAT PART OF THE SWI/4-NEI/4 AND THE NWI/4-SEI/4. SEC. 26. T4IN. R9W. TOWN OF HAYWARD. SAWYER COUNTY, WISCONSIN DESCRIBED AS FOLLOWS:

COMMENCING AT THE EAST QUARTER CORNER SAID SEC. 26. THENCE N89° II'51"W 1319.48 FEET: THENCE N00° 16'05"W 15.52 FEET TO THE POINT OF BEGINNING: THENCE N00° 16'05"W 109.48 FEET: THENCE N89° II'51"W 344.23 FEET TO THE SHORE OF HAYWARD LAKE: THENCE S33° 32'33"W ON A MEANDER LINE OF SAID LAKE 146.75 FEET: THENCE S30° 46'53"E ON SAID MEANDER LINE 117.02 FEET: THENCE S80° 35'21"E ON SAID MEANDER LINE 135.58 FEET: THENCE ON AND ARC OF A CURVE TO THE RIGHT 269.45 FEET AND WHOSE CHORD BEARS N60° 37'02"E 266.43 FEET TO THE POINT OF BEGINNING. SAID PARCEL INCLUDES ALL LAND FROM SAID MEANDER LINE TO THE WATERS EDGE. AND SUBJECT TO ANY EASEMENTS OR RESTRICTIONS OF RECORD.

I CERTIFY THAT I HAVE FULLY COMPLIED WITH THE PROVISIONS OF SECTION 236.34 OF THE WISCONSIN REVISED STATUTES AND THE ORDINANCE OF SAWYER COUNTY IN SURVEYING AND MAPPING SAME.

THIS SURVEY WAS MADE AT THE REQUEST OF RON KRETSCHMER.

Jule Z. Il iott LYLE J. ELLIOTT. RLS 1300 DATE: NOVEMBER 14. 1996



SEP 1 0 2010 AYRES ASSOCIATES

P.O. BOX 985 • HAYWARD, WISCONSIN 54843-0985

August 26, 2010

Jamie Dunn Wisconsin Department of Natural Resources 810 West Maple Street Spooner, WI 54801

Re: Case Closure

Northern Lakes Cooperative Bulk Plant

Chippewa Trail Road Hayward, Wisconsin BRRTS No. 02-58-000049

Dear Mr. Dunn:

As part of our closure request for the Northern Lakes Cooperative Bulk Plant site in Hayward, Wisconsin I have provided a copy of the deed including a legal description for the property. The property is affected by ground water contamination above NR 140 enforcement standards. The legal description for the Northern Lakes Cooperative Bulk Plant property was obtained from our records. I believe this is the most recent and accurate description of the affected property.

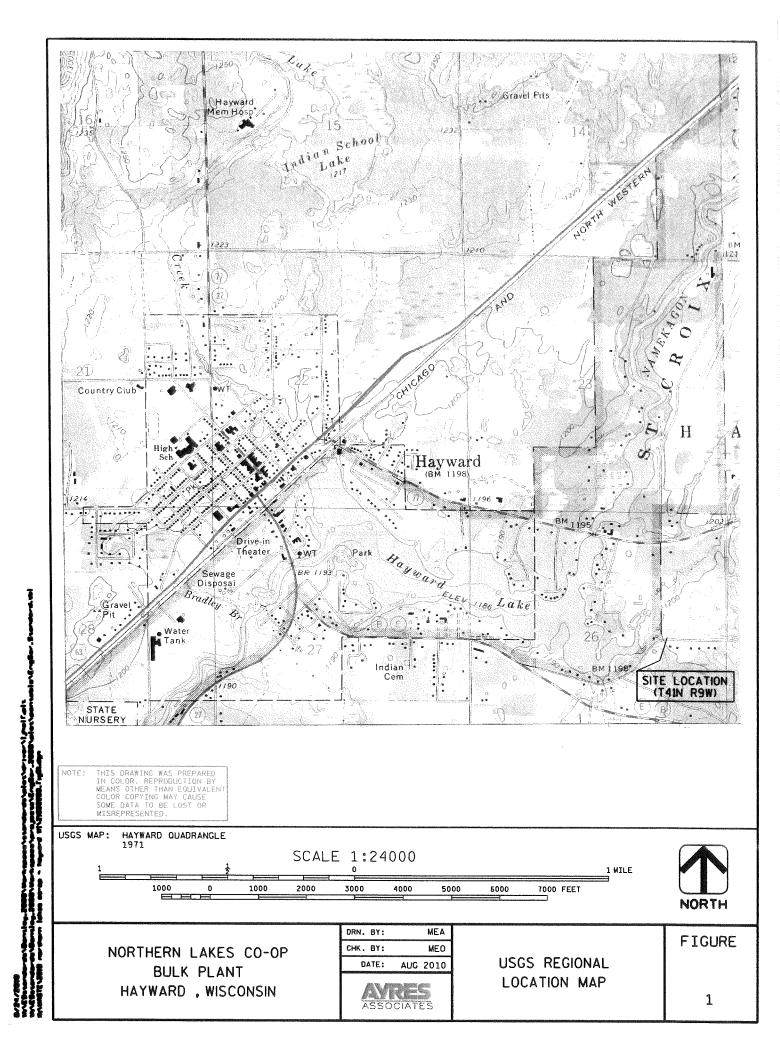
If you have any questions, please contact me at (715) 634-3211.

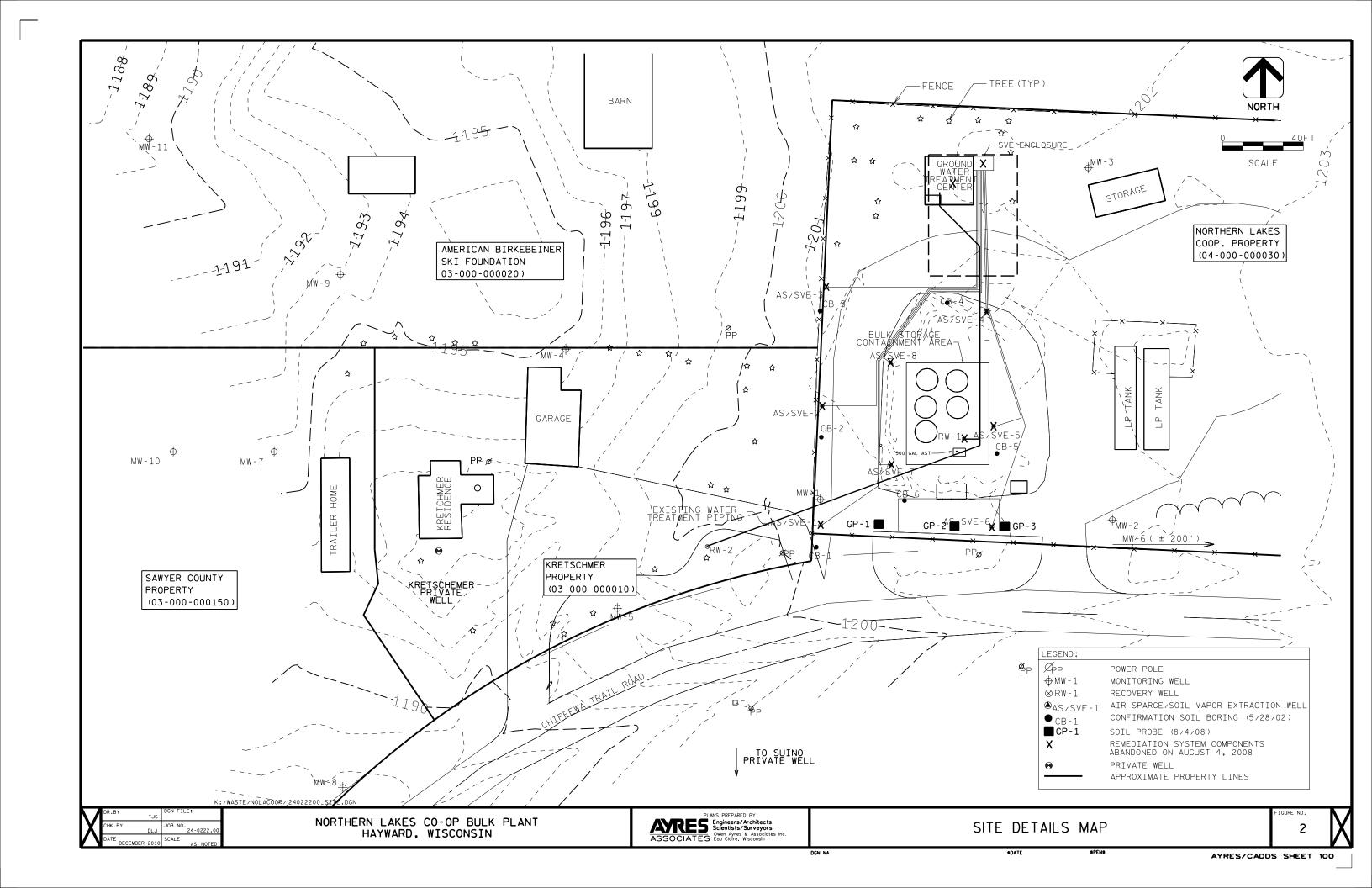
Sincerely.

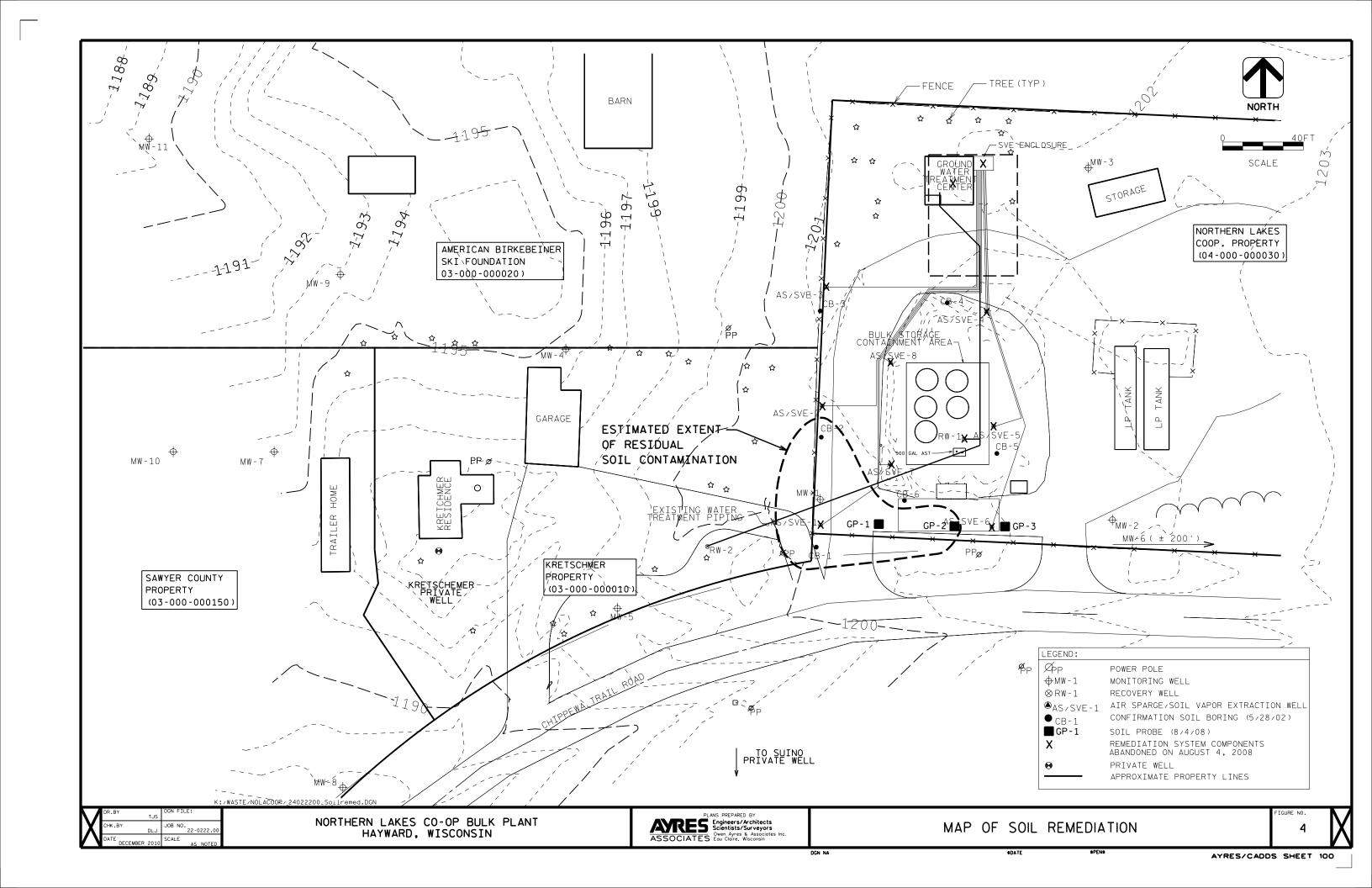
Mike Covelli

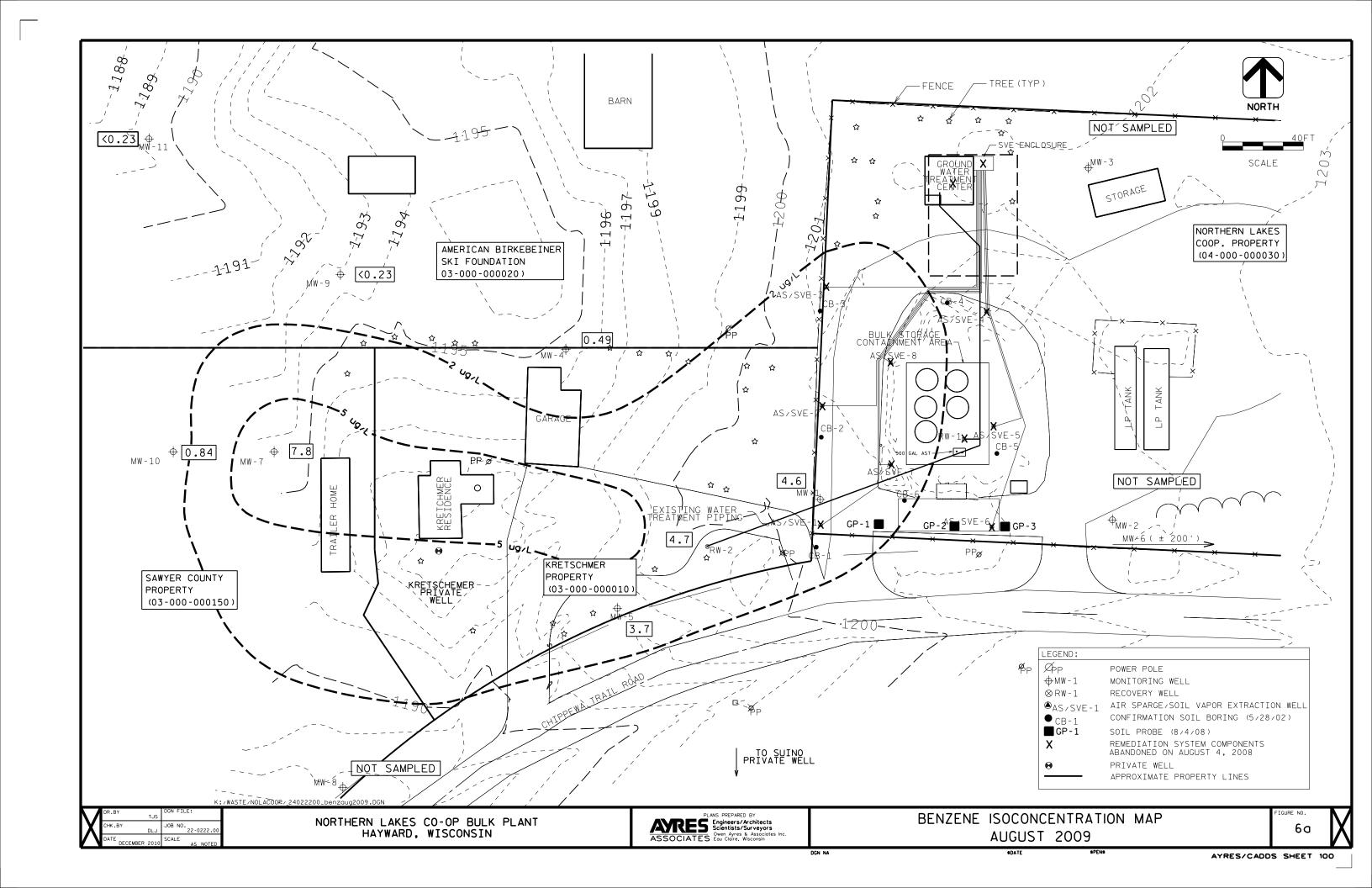
Northern Lakes Cooperative

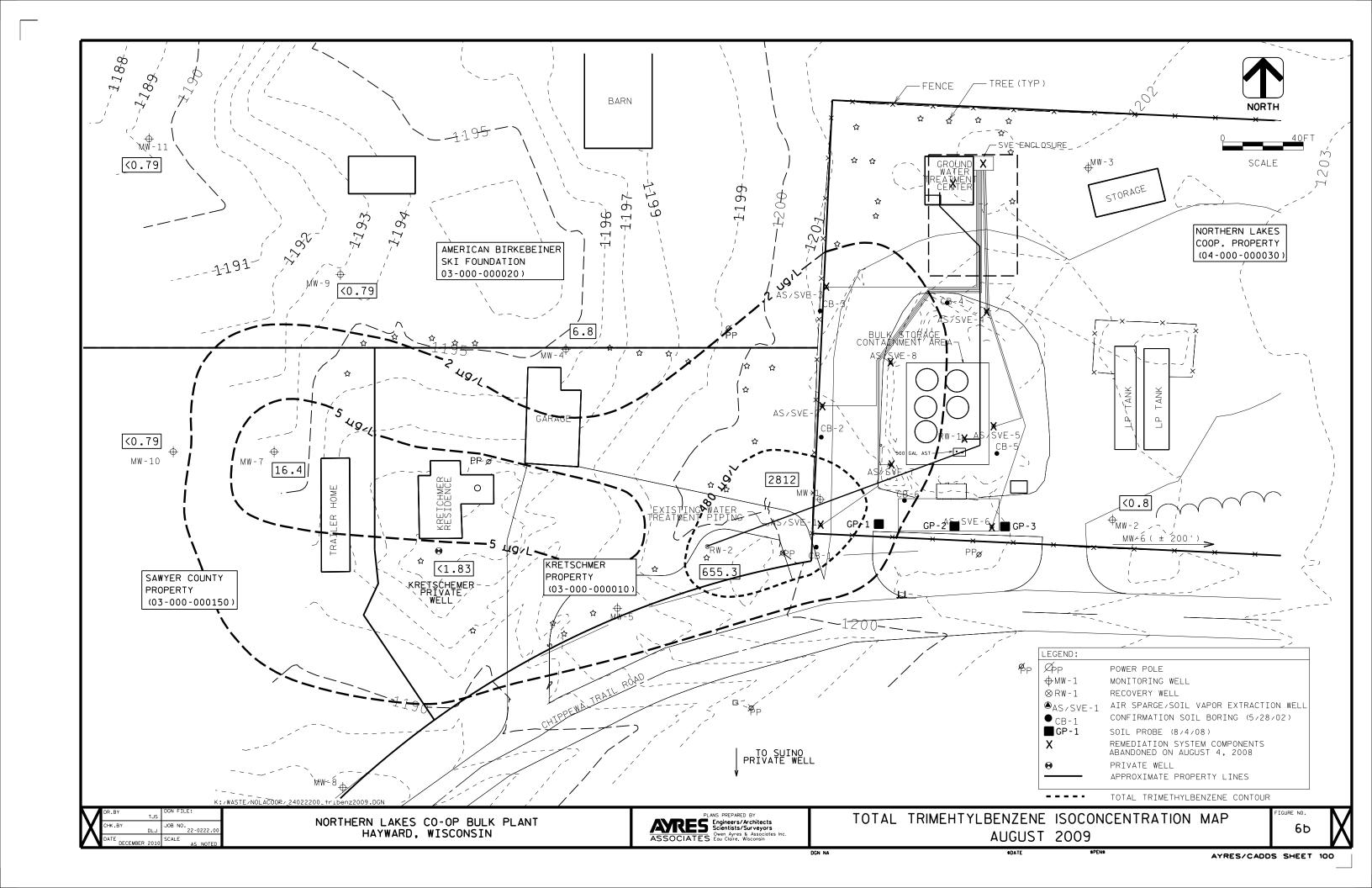
Enclosure

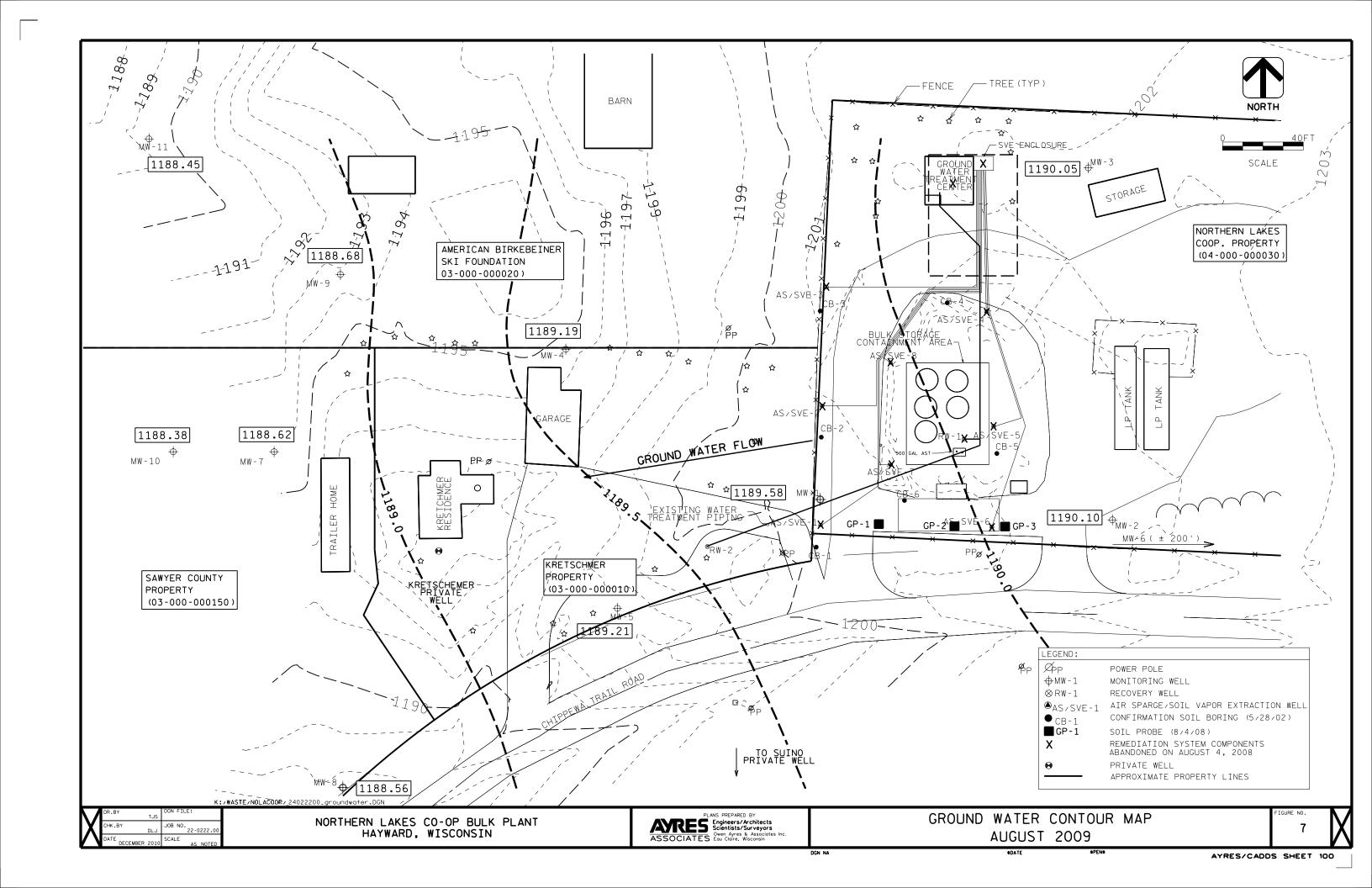


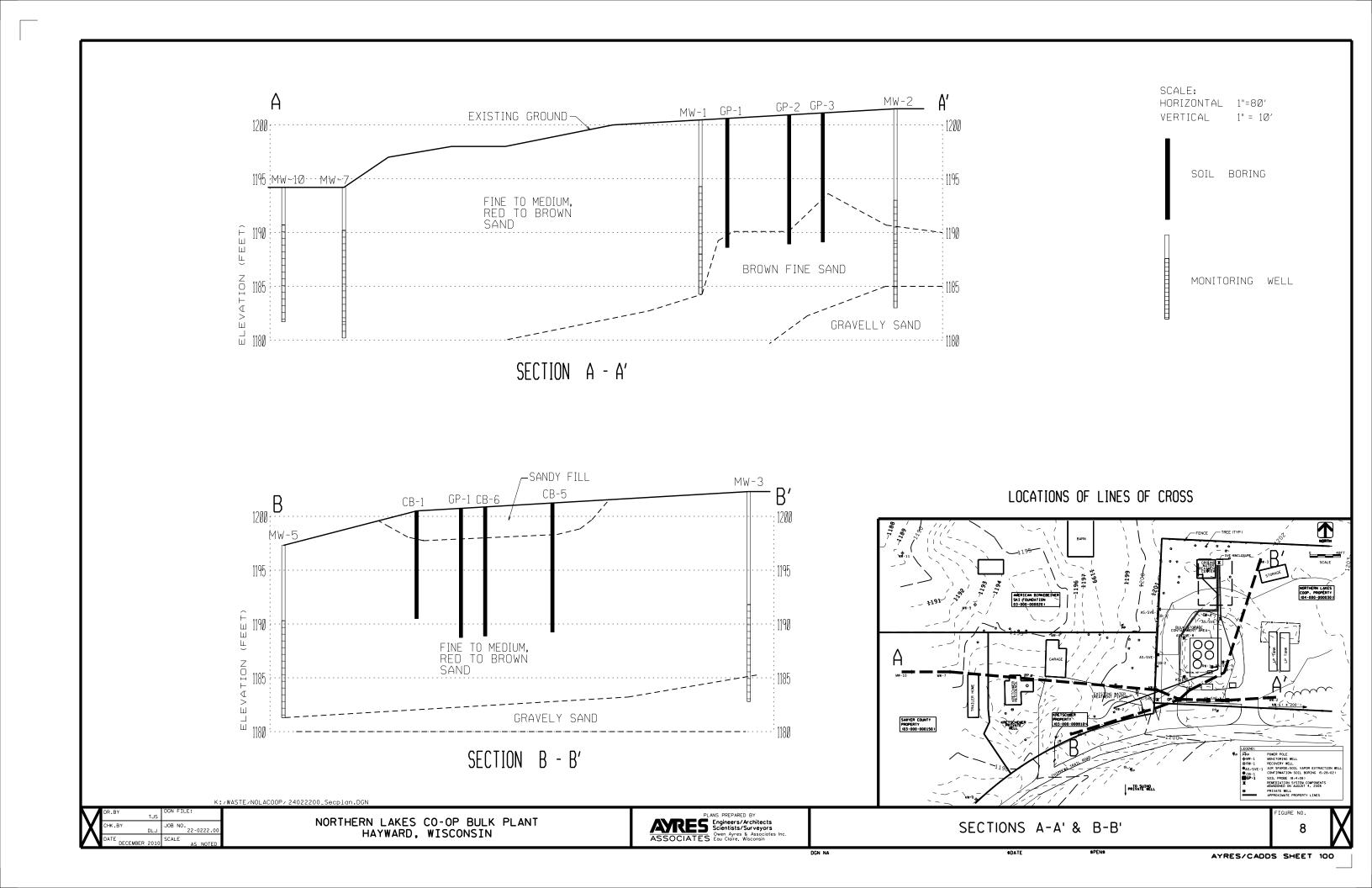












#### TABLE 1 SOIL SAMPLE RESULTS SUMMARY NORTHERN LAKES COOPERATIVE

HAYWARD, WISCONSIN

	<del></del>			·	Γ						
AYRES		SAMPLE	PID or FID	GRO or							
BORING NO.	SAMPLE DATE	DEPTH	RESPONSE	TPH	В	E	T	Х	MTBE	1,2,4-TMB	1,3,5-T <b>M</b> B
AB-1 (B-1)		(feet) 2.5 - 4.5	(i.u.) 1077.0	(mg/kg) 1900	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
AB-2 (B-2)		10-12	23,5	160	2.2	<0.31	9	65	<del>vev</del>		
AB-3	10/30/91			~	1.1	1.4	4.7	8.1			
		7.5-9.5	299.0	28,000	<44	2,400	310	280	<44	1,800	730
AB-4	10/30/91	10-12	634.0	0.38	0.057	0.063	0.078	ND	0.055	0.012	ND
AB-5	10/31/91	10-12	250.0	210	0.19	1.50	0.94	0.29	0.15	0.98	0.39
AB-6	11/7/91	12-13	NA NA	1,000	2.00	<b>4</b> 2. <b>0</b> 0	9.90	8.90	3.00	44.00	14.00
AB-7	11/7/91	12-13	417.0	0.56	ND	0.01	0.009	ND	ND	ND	ND
AB-8	11/7/91	12-13	41.0	ND	ND	ND	ND	ND	ND	ND	ND
MW-1	05/24/91	8-10	760	0.005	ND	ND	ND	ND			
MW-1	05/24/91	14-15	104	150	0.5	ND	ND	ND			
MW-2	05/24/91	12-13	13	ND	ND	ND	ND	ND			
MW-3	05/24/91	5-6	230	ND	ND	ND	ND	ND			·····
MW-3	05/24/91	11.6-13.6	3.7	ND	ND	ND	ND	ND			
MW-4	09/19/91	5-7	NR	10	ND	ND	ND	ND	0.003	ND	ND
MW-4	09/19/91	13-15	44	17	ND	ND	0.002	ND	ND	ND	ND
MW-5	09/19/91	7.5-9.5	3	ND	ND	ND	ND	ND	ND	ND	ND
MW-6	08/04/92	17.5-19.5	1	ND	ND	ND	ND	ND	ND	ND	ND
MW-7	08/04/92	4-6	5.2	ND	ND	ND	ND	ND	ND	ND	ND
MW-8	08/04/92	6-8	3	ND	ND	ND	ND	ND	ND	ND	ND
B-3	01/03/96	7.5 - 9.5	80.0	<1,0	<0.025	<0.025	<0.025	<0.05	<0.025	<0.025	<0.025
B-3	01/03/96	15.0 - 17.0	2.0	<1.0	<0.025	<0.025	<0.025	<0.05	<0.025	<0.025	<0.025
B-4	01/03/96	7.5 - 9.5	30.0	<1.0	<0.025	<0.025	<0.025	<0.05	<0.025	<0.025	<0.025
B-4	01/03/96	12.5 - 14.5	8.0	<1.0	<0.025	<0.025	<0.025	<0.05			
MW-9	01/03/96	2.5 - 4.5	0.2	<1.0					<0.025	<0.025	<0.025
MW-9		10.0 - 12.0	76		<0.025	<0.025	<0.025	<0.05	<0.025	<0.025	<0.025
MW-10	01/03/96			<1.0	0.57	0.038	<0.025	<0.05	<0.025	<0.025	<0.025
		7.5 - 9.5	10	<1.0	<0.025	<0.025	<0.025	<0.05	<0.025	<0.025	<0.025
MW-10	01/03/96 IR <b>720 So</b> il	10.0 - 12.0	7	<1.0	<0.025	<0.025	<0.025	<0.05	<0.025	<0.025	<0.025
APIAIN IN	120 3011	Gleanup S	uandards	100	0.005	2.9	1.5	4.1	None	None	None

#### ABBREVIATIONS AND ACRONYMS

GRO = Gasoline Range Organics

B = Benzene

E = Ethylbenzene

T = Toluene

X = Total Xylenes

MTBE = Methyl tert-butyl ether

1,2,4-TMB = 1,2,4-Trimethylbenzene

1,3,5-TMB = 1,3,5-Trimethylbenzene mg/kg = milligrams per kilogram

#### **DESIGNATIONS**

Blank boxes in table represent samples that were not analyzed

= Exceedances of NR 720 Soil Cleanup Standards

< = Not detected at or above this value

#### TABLE 1 SOIL ANALYTICAL RESULTS

										1,2,4-	1,3,5-
		Sample	FID			Ethyl-		Total		Trimethyl-	Trimethyl-
		Depth	Response	GRO	Benzene	benzene	Toluene	Xylenes	MTBE	benzene	benzene
Boring	Date	(feet)	(i.u.s.)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
AS/SVE-2	10/30/97	2.5-4.5	NR	-	•	-	~	-	-	-	-
		5.0-7.0	NR	-	-	-	-	-	-	-	-
		7.5-9.5	1800	-		-	-	•	-	-	-
		10.0-12.0	3300	3.4	0.042	0.040	0.16	0.32	<0.025	0.30	0.081
		12.0-14.0	2300	33.0	3.6	0.61	5.0	3.7	0.057	1.4	0.40
		14.0-16.0	45	-	-	•	-		•	-	_
		16.0-18.0	460	•	-	-	-	-	•	-	-
		18.0-20.0	470	-	-	1	-	-	-	-	
		20.0-22.0	420	-	-	-	-	-	-	-	-
AS/SVE-4	10/30/97	5.0-7.0	NR	-	-	-	-	-	•	-	•
		7.5-9.5	10	•	-	-	-	-	-		•
		10.5-12.5	10	-	-	-	-	-	-	-	-
		12.5-14.5	18	1.5	0.062	0.390	0.042	0.045	<0.025	<0.025	<0.025
		15.0-17.0	10	<1.3	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
		17.0-19.0	2	-	-		-	•	-		-
		19.0-21.0	2	-	-	-	-	-	-	-	-
		21.0-23.0	2	•	•	-	-			-	-
		23.0-25.0	5	-	-	-	-	-	-	-	-
		25.0-27.0	NR	-	-	-	-	-	-	-	-
		27.0-29.0	3	-	_		-	-			-
AS/SVE-6	10/30/97	2.5-4.5	19	-	-	-	-	-	-	-	-
<del></del>		5.0-7.0	56	•	-	-	-	-	-	-	
		7.5-9.5	500	•	•	-	-	-		•	
		10.0-12.0	1500	410	0.73	9.2	18	56	0.30	37.00	10
		12.0-14.0	920	-	-	•		•		-	-
		14.0-16.0	75	•	-	-	•	•	-	-	
		16.0-18.0	166	-	•	•	•	-	-	-	-
NR 72	20.09 Soil	Cleanup Sta	andard	100	5.5	1,500	2,900	4,100	NS	NS	NS
							NID - No sees				

- = Not analyzed

= Exceeds NR 720 Soil Cleanup Standard

< = Less than the detection limit shown

i.u.s. = Instrument units

mg/kg = Milligrams per kilogram, equivalent to parts per million (ppm)

NR = No response

NS = No standard

MTBE = Methyl-tert-butyl ether

### TABLE 1 (Cont.) SOIL ANALYTICAL RESULTS

Boring	Date	Sample Depth (feet)	FID Response (i.u.s.)	GRO (mg/kg)	Benzene (mg/kg)	Ethyl- benzene (mg/kg)	Toluene (mg/kg)	Total Xylenes (mg/kg)	MTBE (mg/kg)	1,2,4- Trimethyl- benzene (mg/kg)	1,3,5- Trimethyl- benzene (mg/kg)
AS/SVE-8	10/30/97	2.5-4.5	NR NR	- (9/1.9/	-	- (33)	-	-	-	-	
7.0/0 12 0	10/00/07	5.0-7.0	0.6	-	-	-	-	-	-	-	-
		7.5-9.5	No Recovery	-	_	-	-	-	-	_	-
		10.0-12.0	978	-	-	-	-		-	-	-
		12.0-14.0	80	-	-	-	-	-	-	-	•
		14.0-16.0	170	<1.3	<0.025	0.040	0.23	0.23	<0.025	0.075	0.10
		16.0-18.0	2.8	•	-	-	-	•	•	ę	-
		18.0-20.0	No Recovery	-	-	-	-	•	-	•	•
		20.0-22.0	22	-	-	-	•	•	-	_	<u> </u>
MW-11A	10/30/97	2.5-4.5	No Recovery		-		-		-	-	-
IVIVV-IIA	10/30/31	5.0-7.0	76	<1.3	0.036	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
		7.5-9.5	106	-			•	-	-	-	-
		10.0-12.0	80		-	-	•	_	-	-	-
			l								
MW-11	10/30/97	2.5-4.5	0.4	-	-	-	-	-	0.005	-0.005	-0.005
		5.0-7.0	0.9	<1.3	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
		7.5-9.5	0.6	<1.3	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
		10.0-12.0	No Recovery	•	•	•	-	•	-	-	-
NR 7	20.09 Soil	Cleanup St	andard	100	5.5	1,500	2,900	4,100	NS	NS	NS

- = Not analyzed

= Exceeds NR 720 Soil Cleanup Standard

< = Less than the detection limit shown

i.u.s. = Instrument units

mg/kg = Milligrams per kilogram, equivalent to parts per million (ppm)

NR = No response

NS = No standard

MTBE = Methyl-tert-butyl ether

### TABLE 1 SOIL SAMPLE RESULTS

					<del></del>						
										1.3.5	1,2,4
			FID				Ethyl-	Total		Trimethyl-	Trimethyl-
Sample	Date	Depth	as	GRO	Benzene	Toluene	benzene	Xylenes	MTBE	benzene	benzene
Location	Collected	(Feet)	i.u.	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
CB1-1	5/28/2002	0-2	1	<1.6	<0.025	<0.025	<0.025	<0.050	<0.025	<0.025	<0.025
CB1-6	5/28/2002	10-12	>1000	1800	<2.0	47	22	178	<2.4	63	170
CB2-1	5/28/2002	0-2	85	8	<0.025	<0.025	<0.025	<0.050	<0.025	2.6	0.067
CB2-6	5/28/2002	10-12	>1000	1000	<1.0	<1.1	4.2	19	<1.2	18	29
CB3-2	5/28/2002	2-4	1	<1.6	<0.025	<0.025	<0.025	<0.050	<0.025	<0.025	<0.025
CB3-6	5/28/2002	10-12	4	<1.6	<0.025	<0.025	<0.025	<0.050	<0.025	<0.025	<0.025
CB4-2	5/28/2002	2-4	1	<1.6	<0.025	<0.025	<0.025	<0.050	<0.025	<0.025	<0.025
CB4-5	5/28/2002	8-10	20	<1.6	<0.025	<0.025	<0.025	<0.050	<0.025	<0.025	<0.025
CB5-1	5/28/2002	0-2	500	10	<0.025	0.067	0.11	0.49	<0.025	0.19	0.45
CB5-6	5/28/2002	10-12	100	29	<0.025	<0.025	0.044	0.115	<0.025	0.22	0.38
CB6-2	5/28/2002	2-4	1	<1.6	<0.025	<0.025	<0.025	<0.050	<0.025	<0.025	<0.025
CB6-6	5/28/2002	10-12	500	75	<0.025	<0.025	0.073	0.115	<0.025	<0.025	<0.025
GP-1	8/4/2008	0-2	3.0	<2.6	<0.025	<0.025	<0.025	<0.075	<0.025	<0.025	<0.025
		4-6	6.0	6.4	<0.025	<0.025	<0.025	<0.075	<0.025	<0.025	<0.025
Water	@ 10.0 feet	10-12	100.0	125	<0.0625	<0.0625	0.194	1.693	<0.0625	4.5	9.8
GP-2	8/4/2008	0-2	4.0	<2.6	<0.025	<0.025	<0.025	<0.075	<0.025	<0.025	<0.025
		4-6	28.0	473	<0.312	<0.312	<0.312	1.594 <sup>J</sup>	<0.312	4.3	7.7
Water (	@ 10.5 feet	10-12	64.0	NA	NA	NA	NA	NA	NA	NA	NA
GP-3	8/4/2008	0-2	22.0	<2.6	<0.025	<0.025	<0.025	<0.075	<0.025	<0.025	<0.025
		4-6	20.0	2.6	<0.025	<0.025	<0.025	<0.075	<0.025	<0.025	<0.025
Water (	@ 10.5 feet	10-12	10.0	<2.7	<0.025	<0.025	<0.025	<0.075	<0.025	<0.025	<0.025
NR 720.0	09 Table 1 RC	CL C		100	0.0055	1.5	2.9	4.1	NS	NS	NS
NR 746.0	06 Table 1			NS	8.5	38	4.6	42	NS	11.0	83.1
NC - No -4											

NS = No standard

<sup>=</sup> Exceeds NR 720 standard

J=Estimated concentration above the method detection limit and below the adjusted reporting limit

Date   SRO   DRO   Benzene   benzene   Toluene   Xylene   MTBE   TMB   TMB   MW-1(a)   6/12/1991   NA   NA   3900   4300   35000   27000   2900   NA   S/20/1999   11,000   NA   780   60   1500   1620   44   1240   43/1000   1,100   NA   20   82   290   1050   41,1   1050   41/2/2/2000   3,600   NA   42   80   1800   1760   420   422   42/2001   25/001   3,000   NA   42   80   1800   1760   40   1850   42/2/2/2001   25/000   NA   210   790   8300   9000   400   1850   42/2/2/2004   15,000   NA   210   790   8300   9000   400   1850   42/2/2/2004   15,000   NA   29   310   3900   4000   412   1150   21/2/2/2005   35,000   NA   29   310   3900   4000   412   1150   21/2/2/2005   35,000   NA   12   1100   8000   17100   418   4510   21/2/2005   35,000   NA   16   910   5700   12100   49,0   3340   22/2/2/2006   26,000   NA   270   1000   170   2400   450   2350   22/2/2/2006   26,000   NA   270   1000   170   2400   450   2350   20/2/2/2006   26,000   NA   22   590   1700   11300   50.0   3530   50.0   3530   3520   3520   3000	Naphtha- lene (ug/L) NA NA NA NA NA NA NA
MW-1(a)   6/12/1991   NA   NA   3900   4300   35000   27000   2900   NA	NA N
MW-1(a)   6/12/1991   NA	NA N
8/13/1999         7,700         NA         20         82         290         1050         <1.1         1050           5/11/2000         1,100         NA         <2.5	NA
5/11/2000         1,100         NA         <2.5         12         8         133         <1.5         209           8/7/2000         840         NA         1.3         3         21         43         <0.4	NA
8/7/2000         840         NA         1.3         3         21         43         <0.4	NA NA NA NA NA NA
12/22/2000         3,600         NA         <20	NA NA NA NA NA
2/6/2001         5,300         NA         42         80         1800         1760         <20         242           5/8/2001         9,400         NA         57         160         2100         3300         <20	NA NA NA NA
5/8/2001         9,400         NA         57         160         2100         3300         <20         392           8/2/2001         25,000         NA         190         600         6400         9600         <40	NA NA NA NA
8/2/2001         25,000         NA         190         600         6400         9600         <40         1850           5/28/2002         28,000         NA         210         790         8300         9000         <80	NA NA NA
5/28/2002         28,000         NA         210         790         8300         9000         <80         2310           2/3/2004         15,000         NA         29         310         3900         4000         <12	NA NA
2/3/2004         15,000         NA         29         310         3900         4000         <12         1150           8/10/2004         43,000         NA         12         1100         8000         17100         <18	NA
8/10/2004         43,000         NA         12         1100         8000         17100         <18	
2/4/2005         35,000         NA         16         910         5700         12100         <9,0	
8/16/2005         18,000         NA         9         540         1900         6100         3,1         2360           2/28/2006         26,000         NA         7.5         750         2600         11000         <9,0	NA NA
2/28/2006     26,000     NA     7.5     750     2600     11000     <9.0	NA NA
8/2/2006         26,000         NA         270         1000         170         2400         <50         2850           1/10/2007         26,000         NA         22         590         1700         11300         50.0         3530	NA NA
1/10/2007 26,000 NA 22 <b>590</b> 1700 11300 <b>50.0</b> 3530	NA NA
	NA NA
	NA NA
	NA NA
3/6/2008 NA NA 2.8 <sup>3</sup> 314 471 4410 6.6 <sup>3</sup> 2266 8/5/2008 NA NA 4.0 <sup>3</sup> 490 727 6420 <7.2 3330	NA NA
3/4/2009 NA NA <11.4 545 1530 9320 <18.0 4503	NA NA
8/4/2009 NA NA <4.6 239 387 3180 <7.2 2812	NA NA
MW-2(b) 4/8/1993 NA NA <1.0 <1.0 <1.0 <1.0 <1.0 <1.0	NA NA
8/10/1994 <30 NA <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0	NA NA
7/6/1995 <50 69 <0.2 <0.2 <0.2 <0.5 <0.2 <0.3	NA NA
1/10/1996 <50 <29 <0.2 <0.2 <0.2 <0.6 <0.2 <0.3	<0.3
5/7/1997 <30 <28 <0.2 <0.2 <0.5 <0.2 <0.40.5	NA NA
5/13/1998 <30 <27 <0.2 <0.2 <0.2 <0.6 <0.2 <0.4	NA NA
5/20/1999 <50 NA <0.26 <0.24 <0.21 <0.97 <0.22 <0.86	NA
5/11/2000 <14 NA <0.5 <0.5 <0.5 <0.5 <0.3 <1.0	NA
12/22/2000 <14 NA <0.4 <0.4 <0.4 <1.1 <0.4 <0.8	NA
5/7/2001 <14 NA <0.4 <0.4 <0.4 <1.1 <0.4 <0.8	NA
2/3/2005 <50 NA <0.1 <0.4 <0.4 <1.1 <0.4 <0.8	NA
2/28/2006 <50 NA <0.14 <0.40 <0.36 <1.1 <0.36 <0.79	NA
1/10/2007 <31 NA <0.50 <0.50 <0.50 <1.40 <0.50 <1.0	NA
3/6/2008 NA NA <0.14 <0.40 <0.36 <1.1 <0.36 <0.79	NA
8/5/2008 NOT SAMPLED	
3/4/2009 NA NA <0.23 <0.40 <0.36 <1.1 <0.36 <0.79	NA NA
MW-3(b) 4/8/1993 NA NA <1.0 <1.0 <1.0 <1.0 <1.0 <1.0	NA
8/10/1994 <30 NA <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0	NA
7/6/1995 <50 <31 <0.2 <0.2 <0.2 <0.5 <0.2 <0.3	NA
1/10/1996 <50 NA <0.2 <0.2 <0.2 <0.6 <0.2 <0.3	<0.3
5/7/1997 <30 <28 <0.2 <0.2 <0.2 <0.5 <0.2 <0.4	NA
5/13/1998 <30 <27 <0.2 <0.2 <0.2 <0.6 <0.2 <0.4	NA
5/20/1999 <50 NA <0.26 <0.24 <0.21 <0.97 <0.22 <0.86	NA
5/11/2000 <14 NA <0.5 <0.5 <0.5 <0.5 <0.3 <1.0	NA
12/22/2000 <14 NA <0.4 <0.4 <0.4 <1.1 <0.4 <0.8	NA NA
5/7/2001 <14 NA <0.4 <0.4 <1.1 <0.4 <0.8	NA NA
2/3/2005 <50 NA <0.1 <0.4 <0.4 <1.1 <0.4 <0.8	NA NA
2/28/2006 <50 NA <0.14 <0.40 <0.36 <1.1 <0.36 <0.79	NA NA
1/10/2007 <31 NA <0.50 <0.50 <0.50 <1.4 <0.50 <1 3/6/2008 NA NA <0.14 <0.40 <0.36 <1.1 <0.36 <0.79	NA NA
	NA NA
8/5/2008 NOT SAMPLED  3/4/2009 NA NA < <0.23 < 0.40 < 0.36 < 1.1 < 0.36 < 0.79	NA NA
WDNR NR 140 ES NS NS 5 700 1000 10000 60 480	
WDNR NR 140 PAL         NS         NS         0.5         140         200         1000         12         96	100

#### ABBREVIATIONS AND ACRONYMS

GRO = Gasoline range organics DRO = Diesel range organics

MTBE = Methyl tert-butyl ether

1,2,4 TMB = 1,2,4-Trimethylbenzene

1,3,5 TMB = 1,3,5-Trimethylbenzene

PAL = Preventive Action Limit

NS = No standard

WDNR-NR 140 Preventive Action Limits Exceedance 0.0 = WDNR-NR 140 Enforcement Standard Exceedance

FOOTNOTES (a) = Product present in this well after 6/12/91; no samples collected until May 20, 1999

(b) = Samples collected at MW-2 and MW-3 from June 1992 through January 1993 did not contain detectable levels of PVOCs at a detection limit between 1.0 uG/L and 5.0 uG/L.

					Ethyl-		Total		Total	Naphtha-
	Date	GRO	DRO	Benzene	benzene	Toluene	Xylene	MTBE	TMB	lene
Well ID	Sampled	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)
MW-4	11/11/1991	NA	NA	17	8	<5.0	16.0	<5.0	<5.0	NA NA
	2/10/1992	NA	NA.	44	10	<1.0	19.0	<1.0	14	NA NA
	4/21/1992	NA	NA NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NA NA
	8/12/1992	NA NA	NA	440	<50	59	71.0	<50	<50	NA NA
	10/24/1992	NA	NA NA	3300	<120	710	190.0	<120	<120	NA NA
	1/7/1993	NA.	NA NA	3300	<120	190	<120	<120	<120	NA NA
	4/8/1993	NA NA	NA NA	3100	<120	850	330.0	<120	<120	NA NA
	7/15/1993	NA NA	NA NA	710	9	<5.0	14.0	39	<5.0	NA NA
	10/4/93(c)	3,500	<230	1500	38	210	128.0	5	26	24
	1/12/94(d)	8,400	480	3900	<500	2100	770.0	<500	<500	37
	8/10/94(d)	2,200	NA NA	1200	47	170	120.0	36	43	NA NA
	7/6/1995	2,200	250	890	53	320	248,0	<2,0	68	NA NA
	1/10/1996	8,820	630	4070	188	955	691.0	<2.0	112	40
	5/7/1997	910	130	230	16.00	80,00	97.0	<0.3	32	NA NA
	2/17/1998	3,600	340	3000	60	30	74.3	18	41	NA NA
	5/13/1998	2,800	290	1300	38	280	190.0	<5.0	58	NA NA
	8/12/1998	4,700	390	1600	140	600	580.0	33	115	NA NA
	11/13/1998	3,000	760	1700	120	25	230.0	38	72	NA NA
	2/10/1999	910	NA	420	19	8.0	19.0	12	13	NA NA
	5/20/1999	350	NA NA	160	1,1	1,4	3.3	1.3	1,5	NA NA
	8/13/1999	190	NA NA	110	<0.24	0.58	<0.97	0.41	<0.86	
	11/17/1999	78	NA NA	21	3.3	0.56	4.1	0.41	3.2	NA NA
	5/11/2000	41	NA NA	2.4	1.2	<0.5	<2.0	<0.3		
	8/7/2000	90	NA NA	5.4	3.3	11.00	21.2	<0.4	<1.5 8.0	NA NA
	12/22/2000	84	NA NA	1.9	1.3	<0.4	4.1	<0.4	3,6	NA NA
	2/6/2001	100	NA NA	3.2	3.1	0,42	5,0	<0.4	5.0	NA NA
	5/8/2001	210	NA NA	7	5.2	40.00	41.0	0.66	16.9	<b></b>
	8/2/2001	<14	NA NA	<0.40	<0.40	<0.40	<1.1	<0.40	<0.80	NA NA
	5/28/2002	230	NA NA	6.6	7.7	38.00	49.0	<0.40	22.1	NA NA
	2/3/2004	810	NA NA	9,9	15	54.00	89.0	0.88	36,5	NA NA
	8/10/2004	<50	NA NA	<0.14	<0.40					<del>                                     </del>
	2/4/2005	60	NA NA	2.8	0.55	<0.36 <0.36	<1.10	<0.36	<0.79	NA NA
	8/16/2005	700	NA NA	2.8			1.3	<0.36	<0.79	NA NA
	2/28/2006	<50	NA NA	0.55	22.0 <0.40	90.0	190 <1.10	<0.36 <0.36	64.4 <0.79	NA NA
	8/2/2006	<31	NA NA	<0.50						NA NA
	1/10/2007	250	NA NA	3,1	<0.50 5.8	<0.50	<1.40 56	<0.50	<1.0	NA NA
	3/6/2008	NA NA	NA NA	<del></del>		23.0		<0.50	17.8	NA NA
	8/5/2008	NA NA	NA NA	0,40 <sup>3</sup>	<0.40	<0.36	<1.1	<0.36	0.44 <sup>3</sup>	NA NA
Duplicate	8/5/2008	NA NA		0.33	2.4	<0.36	4	<0.36	3.2	NA NA
Duplicate	3/4/2009	NA NA	NA NA	0.33	2.1	<0.36	3	<0.36	2.7	NA
Duplicate	8/4/2009		NA NA	0.50	<0.40	<0.36	<1.1	<0.36	<0.79	NA NA
Duplicate	8/4/2009	NA NA	NA NA	0.44	2.8	<0.36	5.07 <sup>3</sup>	<0.36	6.3	NA
	8/4/2009	NA	NA	0.49 <sup>3</sup>	3.0	<0.36	5.6	<0.36	6,8	NA
WDNR NR		NS	NS	5	700	1000	10000	60	480	100
WDNR NR 1		NS	NS	0.5	140	200		12		

#### ABBREVIATIONS AND ACRONYMS

GRO = Gasoline range organics DRO = Diesel range organics

MTBE = Methyl tert-butyl ether 1,2,4 TMB = 1,2,4-Trimethylbenzene 1,3,5 TMB = 1,3,5-Trimethylbenzene

ES = Enforcement Standard PAL = Preventive Action Limit 0.0

0.0 = WDNR-NR 140 Preventive Action Limits Exceedance = WDNR-NR 140 Enforcement Standard Exceedance

NA = Not analyzed

NS = No standard **FOOTNOTES** 

(a) = Product present in this well after 6/12/91; no samples collected until May 20, 1999

(b) = Samples collected at MW-2 and MW-3 from June 1992 through January 1993 did not contain detectable levels of PVOCs at a detection limit between 1.0 uG/L and 5.0 uG/L.

	I				Ethyl-		Total		Total	Naphtha-
	Date	GRO	DRO	Benzene	benzene	Toluene	Xylene	мтве	TMB	lene
Well ID	Sampled			E .		l I				
MW-5	11/11/1991	(ug/L) NA	(ug/L) NA	(ug/L) <5.0	(ug/L) <5.0	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)
10144-2	2/10/1992	NA NA	NA NA	2800		<5.0 <b>790</b>	<5.0	<5.0	<5.0 162	NA NA
	4/21/1992	NA NA	NA NA	4000	110 190	230	720	300	200	NA NA
	8/12/1992	NA NA	NA NA	700	<50		540	82		NA
	10/24/1992	NA NA	NA NA	380	<50 <50	<50 	52	<50	<50	NA NA
	1/7/1993	NA NA	NA NA	140		<50	<50	38	<50	NA NA
	4/8/1993	NA NA	NA NA	340	<5.0	22	15	51	<5.0	NA
		NA NA	NA NA	220	28	35	50		<25	NA NA
	7/15/1993				<5	18	<5	75	<5	NA
	10/4/93(c)	120	<230	37 1700	<1	<1	<1	<1	<1	1
	1/12/94(d)	8,300	280	140	310	2700	1300	<250 40	<250	35
	8/10/1994	560	NA <30		2	11	14		8	NA NA
	7/6/1995 1/10/1996	<50		<0.2 55	<0.2	<0,2	<0.5	<0.2	<0.2	NA
	<u> </u>	131	NA 107	18	5	13	4	<0,2	1.6	NA NA
	5/7/1997 2/17/1998	110 <27	<27 <30	0,2	0.4	<0.2	0.8	<0.3	0.4	NA NA
				31	<0.30	<0.20	<0.60	0.2	<0,30	NA NA
	5/13/1998	110	<26		3.2	6.1	9.8	<0.20	4.7	NA NA
•	8/12/1998 11/13/1998	<30 38	46 <26	<0.2 17	<0.2	<0.2	<0.6	<0.2	<0.3	NA NA
				7.8	<0.30	2.6	3.9	1.3	<0.30	NA
	2/10/1999	<30	NA NA		<0.30	<0.20	0.80	<0.20	<0.30	NA NA
	5/20/1999	<50	NA NA	1.2 5.5	<0.24	<0.21	<0.97	<0.22	<0,86	NA
	8/13/1999	<50	NA NA	17	<0.24	<0.21	<0.97	<0.21	<0.86	NA
	11/17/1999	210	NA NA		1.4	1.1	4.4	<0.22	<0.86	NA
	5/11/2000	<14	NA NA	0.5	<0.5	<0.5	<0.5	<0.3	<1.0	NA
	8/7/2000	<14	NA NA	0.57	<0.5	<0.5	<0.5	<0,3	<1.0	NA
	12/22/2000	<14	NA NA	<0.4	<0.4	<0.4	<1.1	<0.4	<0.8	NA
	2/6/2001	<14	NA NA	<0.4	<0.4	<0.4	<1.1	<0.4	<0.8	NA
	5/7/2001	<14	NA	<0.4	<0.4	<0.4	<1.1	<0.4	<0.8	NA
	8/2/2001	<14	NA NA	<0.4	<0.4	<0.4	<1.1	<0.4	<0.8	NA
	2/3/2004	<50	NA NA	<0.3	<0.6	<0.6	<1.8	<0.6	<1.2	NA
	8/10/2004	520	NA NA	6.00	1.9	1.2	54.3	<0.36	31.8	NA
	2/3/2005	<50	NA NA	<0.14	<0.40	<0.36	<1.10	<0.36	<0.79	NA
	8/16/2005	<50	NA	<0.14	<0.40	<0.36	<1.10	<0.36	<0.79	NA
	2/28/2006	<50	NA	<0.14	<0.40	<0.36	<1.10	<0.36	<0.79	NA
	8/2/2006	<31	NA	<0.50	<0.50	<0.50	<1.40	<0.50	<1.0	NA
	1/10/2007	36	NA	<0.50	<0.50	<0.50	2,6	<0.50	1.9	NA
	3/6/2008	NA	NA	6.20	5.6	1.5	4.0	8,20	2.99 <sup>J</sup>	NA NA
	8/5/2008	NA .	NA NA	10.20	158	10.3	439	2.9 <sup>J</sup>	611	NA
	3/4/2009	NA	NA	4.7	79.3	2.5	55,2	3.0	22.1	NA NA
	8/4/2009	NA	NA	3.7	51.5	2.4	114.9	<0.36	189.1	NA NA
1011	I 040			Y				,		
MW-6	8/12/1992	NA NA	NA NA	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA
	10/24/1992	NA	NA	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA
	1/7/1993	NA NA	NA	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA NA
	4/8/1993	NA	NA	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA NA
	7/15/1993	NA	NA	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA .
	8/10/1994	<30	NA NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NA
	7/6/1995	<50	58	<0.2	<0.2	<0.2	<0.5	<0.2	<0.2	NA
	1/10/1996	<50	<30	<0.2	<0.2	<0.2	<0.6	<0.2	<0.2	<0.2
	5/7/1997	<30	<28	<0.2	<0.2	<0.2	<0.5	<0.2	<0.3	NA NA
	5/13/1998	<30	27	<0.2	<0.2	<0,2	<0.6	<0.2	<0.2	NA
	5/20/1999	<50	NA	<0.26	<0.24	<0.21	<0.37	<0.22	<0.86	NA NA
	5/11/2000	<14	NA	<0.5	<0.5	<0.5	<1.5	<0.3	<1.0	NA
	12/22/2000	<14	NA NA	<0.4	<0.4	<0.4	<1.1	<0.4	<0.8	NA
	5/7/2001	<14	NA NA	<0.4	<0.4	<0.4	<1.1	<0.4	<0.8	NA
	L			Well	abandoned or	August 2, 20	001			
WDNR NR 1	140 ES	NS	NS	5	700	1000	10000	60	480	100
WDNR NR 1		NS	NS	0.5	140	200	1000	12	96	10
ABBREVIATIONS AND AC		·			<u> </u>			•		

ABBREVIATIONS AND ACRONYMS

GRO = Gasoline range organics DRO = Diesel range organics MTBE = Methyl tert-butyl ether 1,2.4 TMB = 1,2.4-Trimethylbenzene 1,3,5 TMB = 1,3,5-Trimethylbenzene ES = Enforcement Standard PAL = Preventive Action Limit NS = No standard 0.0 = WDNR-NR 140 Preventive Action Limits Exceedance
0.0 = WDNR-NR 140 Enforcement Standard Exceedance

FOOTNOTES
(a) = Product present in this well after 6/12/91; no samples collected until May 20, 1999

(b) = Samples collected at MW-2 and MW-3 from June 1992 through January 1993 did not contain detectable levels of PVOCs at a detection limit between 1.0 uG/L and 5.0 uG/L.

	11			I	Ethyl-		Total		Total	Naphtha-
	Date	GRO	DRO	Benzene	benzene	Toluene	Xylene	MTBE	TMB	lene
Well ID	Sampled	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(úg/L)	(ug/L)	(ug/L)	(ug/L)
MW-7	8/12/1992	NA	NA	51	<50	<50	<50	<50	<50	NA
	10/24/1992	NA	NA	260	61	<50	77	<50	81	NA
	1/7/1993 4/8/1993	NA NA	NA NA	470	130	160	300	<50	380	NA NA
	7/15/1993	NA NA	NA NA	410 450	230 320	320 620	870 <b>1700</b>	<50 <50	720 960	NA NA
	10/4/93(c)	6,800	1,500	520	230	630	1710	<50 <50	720	NA 160
	1/12/94(d)	7,300	2,000	520	250	540	2000	<120	1010	20
	8/10/94(d)	9,800	NA	740	310	360	2600	41	980	NA
	7/6/95 (g)	3,000	1,100	670	120	<2.0	104.9	<2.0	450	NA
	1/10/96 (9)	3,520	1,200	800	70	70	290	<2.0	520	32
	5/7/1997	3,200	660	1000	70	24	129	<1.5	220	NA
	5/13/1998	11,000	1,800	3100	290	890	1220	<20	600	NA NA
	8/12/1998	5,200	760	1600	170	460	820	48	346	NA
	11/13/1998	5,800	910	1400 1800	200	470 340	870	13	<b>356</b> 675	NA NA
	2/10/1999 5/20/1999	4,300 12,000	NA NA	2100	130 290	1100	650 <b>1690</b>	9,7	750	NA NA
	8/13/1999	7,900	NA NA	2100	370	53	209	<2.2	121	NA NA
	11/13/1999	1,700	NA NA	260	55	8	248	1,2	240	NA NA
	5/11/2000	2,100	NA	220	77	50	460	<3.0	345	NA NA
	8/7/2000	1,900	NA	140	74	55	360	<4.0	323	NA
	12/22/2000	2,800	NA	150	110	260	720	<4.0	365	NA
	2/6/2001	1,800	NA	85	63	80	400	3.6	253	NA
	5/8/2001	1,300	NA	56	44	28	270	<8.0	219	NA
	8/2/2001	1,600	NA	51	46	<2.0	71	<2.0	288	NA NA
	5/28/2002	2,400	NA NA	49	48	30	149	<8.0	218	NA
	2/3/2004	1,100	NA NA	92 110	42	6.6	30	5.4	80.9	NA NA
	8/10/2004 2/4/2005	2,300 2,500	NA NA	60	110 92	36 43	236 280	2.6 2.2	258 264	NA NA
	8/16/2005	1,600	NA NA	47	77	12	80	1.6	162	NA NA
Duplicate	8/16/2005	1,700	NA NA	48	82	15	101	1.7	183.4	NA NA
•	2/28/2006	2,900	NA	34	110	36	480	2,2	488	NA.
Duplicate	2/28/2006	3,200	NA	38	120	40	530	2,3	514	NA
	8/2/2006	2,800	NA	<5.0	82	220	1,040	<5.0	393	NA
	1/10/2007	2,900	NA	57	200	58	490	26.0	325	NA
	3/6/2008	NA	NA	25.9	142	55.9	563	4.4	498	NA
	8/5/2008	NA	NA NA	5.1	18	<0.36	1.98 <sup>J</sup>	<0.36	74	NA
	3/4/2009	NA	NA	3.9	7.6	<0.36	3.18	<0.36	41	NA
Duplicate	3/4/2009	NA NA	NA NA	4.7 7.8	6.9	0.39	2,84	<0,36	38.1	NA NA
	8/4/2009		NA		5.7	0.76 <sup>3</sup>	5	<0.36	16.4	NA
MW-8	8/12/1992	NA	NA	<5.0	<5.0	<5.0	<5,0	<5.0	<5.0	NA
	10/24/1992	NA	NA NA	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA
	1/7/1993	NA NA	NA NA	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA NA
	7/15/1993 8/10/1994	NA <30	NA NA	<5.0 <1.0	<5.0 <1.0	<5.0 <1.0	<5.0 <1.0	<5.0 <1.0	<5.0 <1.0	NA NA
	7/6/1995	<50	<31	<0.2	<0,2	<0.2	<0,5	<0.2	<0.3	NA NA
	1/10/1996	<50	<30	<0.2	<0.2	<0.2	<0.6	<0.2	<0.3	<0.2
	5/7/1997	<30	<28	<0.2	<0.2	<0.2	<0.5	<0.2	<0.4	NA NA
	5/13/1998	<30	<27	<0.2	<0.2	<0.2	<0.6	<0.2	<0.4	1
	5/20/1999	<50	NA	<0.26	<0.24	<0.21	<0.97	<0.22	<0.86	NA
	5/11/2000	<14	NA	<0.5	<0.5	<0.5	<0.5	<0.3	<1.0	NA
	12/22/2000	<14	NA	<0.4	<0.4	<0.4	<1.1	<0.4	<0.8	NA
	5/7/2001	<14	NA	<0.4	<0.4	<0.4	<1.1	<0.4	<0.8	NA
	2/3/2005	<50	NA NA	<0.1	<0.4	<0.4	<1.1	<0.4	<0.8	NA
	2/28/2006	<50	NA NA	<0.14	<0.40	<0.36	<1.1	<0.36	<0.79	NA NA
	1/10/2007	<31	NA NA	<0.50	<0.50	<0.50	<1.40	<0.50	<1.0	NA NA
	3/6/2008 8/5/2008	NA NA	NA	<0.14	<0.40	<0.36	<1.1	<0.36	<0.79	NA
	3/4/2009	NA	NA	<0.23	<0.40	VOT SAMPLE <0.36	<1.1	<0.36	<0.79	NA NA
					·	<del></del>				<del></del>
WDNR NR		NS	NS NS	5	700	1000	10000	60	480	100
WDNR NR	140 PAL	NS	NS	0.5	140	200	1000	12	96	10

ABBREVIATIONS AND ACRONYMS GRO = Gasoline range organics

DRO = Diesel range organics MTBE = Methyl tert-butyl ether
1,2,4 TMB = 1,2,4-Trimethylbenzene
1,3,5 TMB = 1,3,5-Trimethylbenzene ES = Enforcement Standard

PAL = Preventive Action Limit

0,0 0.0

= WDNR-NR 140 Preventive Action Limits Exce ≃ WDNR-NR 140 Enforcement Standard Exceedance

NS = No standard NA = Not analyzed
FOOTNOTES

(a) = Product present in this well after 6/12/91; no samples collected until May 20, 1999

(b) = Samples collected at MW-2 and MW-3 from June 1992 through January 1993 did not contain detectable levels of PVOCs at a detection limit between 1.0 uG/L and 5.0 uG/L.

				T	Ethyl-		Total		Total	Naphtha-
	Date	GRO	DRO	Benzene	benzene	Toluene	Xylene	MTBE	TMB	lene
Well ID	Sampled	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)
MW-9	1/10/1996	18,800	580	5500	447	4550	2452	<40	248	65
	2/7/1996	16,700	740	4120	386	3300	1701	<20	249	83
	5/7/1997	10,000	710	3800	300	2100	1430	<15	305	NA
	5/13/1998	19,000	1,400	4800	420	3200	1940	<40	300	NA
	2/10/1999	770	NA	420	31	<2.0	26	10	17	NA
	5/20/1999	480	NA	270	11	1,0	6.1	1.1	3.3	NA
	8/13/1999	100	NA	55	1.0	0.36	<0,97	0.36	<0.86	NA
	11/17/1999	190	NA	80	7.3	0.93	4.1	0.48	3,3	NA
	5/11/2000	63	NA	33	<0.5	<0.5	<1.5	<0.3	<1.0	NA
	8/7/2000	85	NA	11	2	<0,5	<1.5	<0.4	<2.3	NA
	12/22/2000	51	NA	<0.4	<0,4	<0.4	<1.1	<0.4	<0.8	NA
	2/6/2001	29	NA	4.4	0.7	<0.4	<1,1	<0.4	1.0	NΑ
	5/8/2001	20	NA	3.5	1.0	<0.4	<1,1	<0,4	5.3	NA
	8/2/2001	18	NA	1.5	<0.40	<0.4	<1.1	<0.4	<0.80	NA
	5/28/2002	170	NA	9.9	5.7	1.3	3.1	<0.4	4.8	NA
	2/3/2004	200	NA	5.70	7.9	0.58	3,5	0,88	4.7	NA
	8/10/2004	120	NA	6.3	0.58	0.56	<2,04	<0.36	<0.79	NA
	2/4/2005	120	NA	8.7	4.70	<0.36	<1.10	<0.36	1.1	NA
	8/16/2005	180	NA	6,5	5.00	1.30	2.3	<0.36	2.5	NA
	2/28/2006	<50	NA	2.6	<0.40	<0.36	1.4	<0.36	0.5	NA
	8/2/2006	130	NA	3.1	<0.50	<0.50	<1.4	<0.50	<1.0	NA
	1/10/2007	120	NA NA	3.2	6.40	1.70	5,1	<0.50	4.92	NA
	3/6/2008	NA .	NA NA	1.0	<0.40	<0.36	<1.1	<0.36	<0.79	NA
	8/5/2008	NA	NA NA	0.45 <sup>J</sup>	<0.40	<0.36	<1.1	<0.36	<0.79	NA
	3/4/2009	NA	NA NA	0.57	<0.40	<0.36	<1.1	<0.36	<0,79	NA
	8/4/2009	NA	NA NA	<0.23	<0.40	<0.36	<1.10	<0.36	<0.79	NA NA
MW-10	1/10/1996	92	<30	43	<2.0	<2.0	<0.6	<0.2	<0.3	<0.3
	2/7/1996	66	NA NA	47	<0.2	<0.2	<0.5	<0.2	<0.3	NA
	5/7/1998	170	46	82	1.7	<0.20	<0.3	<0.30	8,0	NA
	2/17/1998	560	<27	360	8.2	2.4	4.2	7.2	9.2	NA
	5/13/1998	2,400	72	1500	<7.5	62	85	10	70	NA
	11/13/1998	790	140	200	32	3.2	5.0	3,8	14	NA
	2/10/1999	1,000	NA NA	190	40	14	54	13	50	NA
	5/20/1999	210	NA NA	79	6.4	3.9	17.7	0.46	9.7	NA
	8/13/1999	2,100 470	NA NA	630 170	58	67	252	4.4	123	NA NA
	5/11/2000	550	NA NA	25	19	1.1	7.9	0.90	14	NA NA
	8/7/2000	49	NA NA	12	4.5	5.4	42.0	1.30	20	NA NA
	5/8/2001	140	NA NA	8	5,4	<0.5 0.5	<2.6 13.1	<0.4 0.80	<4.8 27	NA NA
	8/2/2001	95	NA NA	7	4.0	<0.40				
	5/28/2002	150	NA NA	7.5	8.8	1.7	<1.1 7.8	<0.40 <0.40	11 19	NA NA
	2/3/2004	<50	NA NA	1.4	<0.60	<0.58	<1.8	<0.58	<1.2	NA NA
	8/10/2004	99	NA NA	10	2.5	0.49	3.8	<0.36	<5.50	NA NA
	2/3/2005	<50	NA NA	1.5	0.6	<0.36	<1,10	<0.36	1.1	NA NA
	8/16/2005	<50	NA NA	3.0	0.8	<0.36	1.5	<0.36	2.5	NA NA
	2/28/2006	260	NA NA	5.2	10.0	3.70	34.0	<0.36	30.5	NA NA
	8/2/02006	250	NA NA	4.3	11.0	0.75	24.6	<0.50	21.3	NA NA
Duplicate	8/2/02006	300	NA NA	5.1	12.0	0.76	24.9	<0.50	23.5	NA NA
,	1/10/2007	65	NA NA	5.4	2.1	0.97	4.7	<0.50	3.43	NA NA
	3/6/2008	NA	NA NA	6.1	12.3	0.51	8.3	0.46 <sup>J</sup>	15.7	NA NA
Duplicate	3/6/2008	NA NA	NA NA	5.1	7.4	<0.36	4.01 <sup>J</sup>	<0.36	8.1	NA NA
•	8/5/2008	NA NA	NA NA	1.9	6	<0.36	5.2	<0.36	12.50	NA NA
	3/4/2009	NA NA	NA.	1.7	<0.40	<0.36	<1.1	<0.36	<0.79	NA NA
	8/4/2009	NA NA	NA	0.84 <sup>J</sup>	<0.40	<0.36	<1.10	<0.36	<0.79	NA NA
WDNR NR	140 ES	NS	NS	5	700	1000	10000	60	480	100
WDNR NR		NS	NS	0.5	140	200	1000	12	96	100
ABBREVIATIONS AND		·						L		

/IATIONS AND ACRONYMS GRO = Gasoline range organics

DRO = Diesel range organics MTBE = Methyl tert-butyl ether
1,2,4 TMB = 1,2,4-Trimethylbenzene
1,3,5 TMB = 1,3,5-Trimethylbenzene

ES = Enforcement Standard PAL = Preventive Action Limit NS = No standard

= WDNR-NR 140 Preventive Action Limits Exceedance 0.0 = WDNR-NR 140 Enforcement Standard Exceedance NA = Not analyzed

NS = No standard

FOOTNOTES

(a) = Product present in this well after 6/12/91; no samples collected until May 20, 1999

(b) = Samples collected at MW-2 and MW-3 from June 1992 through January 1993 dkl not contain detectable levels of PVOCs at a detection limit between 1.0 uG/L.

		NONTH	LIXIN L/	INES C						
	_				Ethyl-		Total		Total	Naphtha-
	Date	GRO	DRO	Benzene	benzene	Toluene	Xylene	MTBE	TMB	lene
Well ID	Sampled	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)
MW-11	2/10/1999	<30	NA	16	<0.30	<0,20	<0.60	<0.20	<0.30	NA
	5/20/1999	95	NA	62	<0.24	<0.21	< 0.97	0.38	<0.86	NA
	8/13/1999	<50	NA	1.2	<0.24	<0.21	<0.97	<0.22	<0.86	NA
	11/17/1999	<50	NA	11	<0.24	<0.21	<0.97	0.35	<0.86	NA
	5/11/2000	<14	NA	<0.5	<0,5	<0.5	<0.5	<0.3	<1.0	NA
	8/7/2000	<14	NA	0.7	<0.5	<0.5	<0.5	<0.4	<1.0	NA
	12/22/2000	20	NA	<0.4	<0.4	<0.4	<1.1	<0.4	<0.8	NA
	2/6/2001	<14	NA	<0.4	<0.4	<0.4	<1.1	<0.4	<0.8	NA
	5/7/2001	<14	NA	0.7	<0.4	<0.4	<1.1	<0.4	<0.8	NA
	8/2/2001	<14	NA	<0.40	<0.4	<0.4	<1.1	<0.4	<0.8	NA
	2/3/2004	<50	NA	<0.3	<0.6	<0.6	<1.8	<0.6	<1.2	NA
	8/10/2004	<50	NA	<0.14	<0.14	<0,36	<1.10	<0.36	<0.79	NA
	2/3/2005	<50	NA	<0.14	<0.40	<0.36	<1.10	<0.36	<0.79	NA
	8/16/2005	<50	NA	<0.14	<0.40	<0.36	<1.10	<0.36	<0.79	NA.
	2/28/2006	<50	NA NA	<0.14	<0.40	<0.36	<1.10	<0,36	<0.79	NA NA
	8/2/2006	<31	NA NA	<0.50	<0.50	<0.50	<1.40	<0.50	<1.0	NA NA
	1/10/2007	<31	NA NA	<0.50	<0.50	<0,50	<1.40	<0.50	<1.0	NA NA
	3/6/2008	NA NA	NA NA	<0.14	<0.40	<0.36	<1.1	<0.36	<0.79	NA NA
	8/5/2008	NA NA	NA NA	<0.14	<0.40	<0.36	<1.1	<0.36	<0.79	NA NA
	3/4/2009	NA NA	NA NA	<0.14	<0.40	<0.36	<1.1	<0.36	<0.79	NA NA
	8/4/2009	NA NA	NA NA	<0.23	<0.40	<0.36	<1.10	<0.36	<0.79	NA NA
,			11/0	·			<u> </u>			LIVA
RW-2	2/3/2004	6,900	NA	8.2	15	39	990	<2.3	1320	NA
	8/10/2004	5,100	NA	15	34	90	930	<1.8	1000	NA
	2/4/2005	7,200	NA	6.2	11	36	790	<1.8	1090	NA
	8/16/2005	5,200	NA	7.4	21	27	700	<1.4	920	NA
	2/28/2006	5,000	NA	6	13	48	790	<3.6	1070	NA
	8/2/2006	6,200	NA	<25	<25	39	790	<25	1130	NA
	1/10/2007	5,000	. NA	22	29	36	550	<13	810	NA
	3/6/2008	NA	NA	7.6°	22.2	18.6	727	<3.6	1136	NA
	8/5/2008	NA	NA	9.1	27.9	23	694	<1.8	855.4	NA
	3/4/2009	NA	NA	5.2	11.3	9.7	533.6	<1.8	837	NA
	8/4/2009	NA	NA	4.7°	19.6	8.2	457.2	<1.8	655.3	NA
KRETCHMER(Old)	11/11/1991	NA NA	NA NA	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA
Old	12/9/1991	NA NA	NA NA	18	12	25	47	NA NA	NA NA	NA NA
New	2/10/1992	NA NA	NA NA	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA NA
New	4/8/1993	NA NA	NA NA	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA NA
										· · · · · · · · · · · · · · · · · · ·
New	8/2/2001	<14	NA NA	<0.40	<0.40	<0.40	<5.0	<5.0	<5.0	NA NA
New	5/28/2002	<16	NA NA	<0.40	<0.40	<0.40	<1.4	<0.40	<0.90	NA NA
	8/5/2008	NA NA	NA NA	<0.41	<0.54	<0.67	<1.98	<0.61	<1.8	NA NA
	8/4/2009	NA	NA	<0.41	<0.54	<0.67	<2.63	<0.61	<1.83	NA NA
SUINO	10/24/1992	NA	NA	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA
	4/8/1993	- NA	NA	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA
	8/2/2001	<14	NA	<0.40	<0.40	<0.40	<5.0	<5.0	<5.0	NA
	5/28/2002	<16	NA	<0.40	<0.40	<0.40	<1.4	<0.40	<0.90	NA
	8/5/2008	NA	NA	<0.41	<0.54	<0.67	<2.63	<0.61	<1.8	NA
	8/4/2009	NA	NA	<0.41	<0.54	<0.67	<2.63	<0.61	<1.80	NA
IMPAID 41D 4			·							
WDNR NR 1		NS NS	NS	5	700	1000	10000	60	480	100
WDNR NR 1	4U PAL	NS	NS	0.5	140	200	1000	12	96	10

ABBREVIATIONS AND ACRONYMS
GRO = Gasoline range organics

DRO = Diesel range organics

MTBE = Methyl tert-butyl ether
1,2,4 TMB = 1,2,4-Trimethylbenzene
1,3,5 TMB = 1,3,5-Trimethylbenzene

ES = Enforcement Standard PAL = Preventive Action Limit

0.0 = WDNR-NR 140 Preventive Action Limits Exceedance = WDNR-NR 140 Enforcement Standard Exceedance 0.0

PAL = Preventive Action Limit
NS = Not standard
NA = Not analyzed

FOOTNOTES
(a) = Product present in this well after 6/12/91; no samples collected until May 20, 1999
(b) = Samples collected at MW-2 and MW-3 from June 1992 through January 1993 did not contain detectable levels of PVOCs at a detection limit between 1.0 uG/L and 5.0 uG/L.

# TABLE 4 GROUND WATER ELEVATIONS NORTHERN LAKES COOPERATIVE BULK PLANT

		MW-1			T								
Date	Water (ft.)	Product (ft.)	Product Depth (ft.)	MW-2 (ft.)	MW-3 (ft.)	MW-4 (ft.)	MW-5 (ft.)	MW-6 (ft.)	MW-7 (ft.)	MW-8 (ft.)	MW-9 (ft.)	MW-10 (ft.)	MW-11 (ft.)
6/12/1991	1189.89	1189.97	0.08	1190.40	1190.36	NI	NI						
7/11/1991	1189.38	1190.09	0.71	1190.45	1190.42	NI	NI						
8/28/1991	1189.18	1189.97	0.79	1190.31	1190.27	NI	NI						
9/19/1991	1188.88	1190.18	1.30	1190.44	1190.49	1189.34	1189.39	NI	NI	NI	NI	NI	NI
10/30/1991	1189.22	1190.08	0.86	1190.34	1190.31	1189.38	1189.44	NI	NI	NI	NI	NI	NI
11/11/1991	1189.16	1190.13	0.97	1190.39	1190.38	1189.43	1189.48	NI	NI	NI	N!	NI	NI
12/12/1991	1189.36	1190.33	0.97	1190.42	1190.36	1189.42	1189.49	NI	NI	NI	NI	NI	NI
12/30/1991	1189.07	1190.13	1.06	1190.41	1190.33	1189.45	1189.47	NI	NI	NI	NI	NI	NI
1/9/1992	1189.27	1190.13	0.86	1190.43	1190.39	1189.48	1189.54	NI	NI	NI	NI	NI	NI
1/16/1992	1188.98	1190.01	1.03	1190.31	1190.27	1189.24	1189.30	NI	NI	NI	NI	NI	NI
1/27/1992	1189.26	1190.10	0.84	1190.41	1190.38	1189.48	1189.52	NI	NI	NI	NI	NI	NI
2/10/1992	1188.98	1190.05	1.07	1190.32	1190.26	1189.56	1189.41	NI	NI	NI	NI	NI	NI
4/21/1992	NM	NM	NM	1190.77	1190.72	1189.93	1189.88	NI	NI	NI	NI	NI	NI
6/24/1992	1189.47	1190.11	0.64	1190.47	1190.44	1189.52	1189.57	NI	NI	NI	NI	NI	NI
8/12/1992	1203.38	1203.38	0.00	1190.54	1190.51	1189.64	1189.70	1193.21	1189.06	1189.04	NI	NI	NI
10/24/1992	1189.71	1190.21	0.50	1190.61	1190.58	1189.60	1189.61	1193.08	1189.02	1188.98	NI	NI	NI
12/14/1992	1189.60	1190.07	0.47	1190.44	1190.41	1189.48	1189.52	1192.81	1188.91	1188.83	NI	NI	NI
1/7/1993	NM	NM	NM	1190.43	1190.40	1189.47	1189.51	1192.78	1188.90	1188.83	NI	NI	NI
2/8/1993	1189.61	1190.03	0.42	1190.41	1190.38	1189.45	1189.49	1192.77	1188.89	1188.83	NI	NI	NI
4/8/1993	1189.66	1190.11	0.45	1190.54	1190.51	1189.56	1189.54	1193.03	1188.97	1188.91	NI	NI	NI
7/15/1993	1189.86	1190.26	0.40	NM	NM	1189.67	1189.67	1193.16	1189.07	1188.99	NI	NI	NI
10/4/1993	1189.68	1190.09	0.41	NM	NM	1189.47	1189.51	NM	1188.92	NM	NI	NI	NI
1/12/1994	1189.53	1190.04	0.51	1190.46	1190.43	1189.47	1189.50	1192.86	1188.88	1188.82	NI	NI	NI
8/10/1994	1189.69	1190.15	0.46	1190.57	1190.56	1189.56	1189.58	1192.96	1188.95	1188.89	NI	NI	NI
7/6/1995	1189.65	1190.00	0.35	1190.42	1190.38	1189.43	1189.45	1192.89	1188.87	1188.81	NI	NI	NI
1/10/1996	1189.56	1189.86	0.30	1190.25	1190.20	1189.32	1189.35	1192.62	1188.72	1188.70	1188.78	1188.48	NI
2/8/1996	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	1188.81	1188.54	NM
5/7/1997	1189.56	1190.18	0.62	1190.59	1190.54	1189.56	1189.60	1193.18	1188.95	1188.92	1189.00	1188.71	NM

ABBREVIATIONS

NM = Not Measured

NI = Not Installed

MW = Monitoring Well

# TABLE 4, CONTINUED GROUND WATER ELEVATIONS NORTHERN LAKES COOPERATIVE BULK PLANT

		MW-1											
Date	Water (ft.)	Product (ft.)	Product Depth (ft.)	MW-2 (ft.)	MW-3 (ft.)	MW-4 (ft.)	MW-5 (ft.)	MW-6 (ft.)	MW-7 (ft.)	MW-8 (ft.)	MW-9 (ft.)	MW-10 (ft.)	MW-11 (ft.)
2/17/1998	1189.05	1190.05	1.00	1190.35	1190.30	1189.42	1189.44	1192.73	NM	1188.80	1188.89	1188.61	1188.58
5/13/1998	1190.88	1190.88	0.00	1190.36	1190.33	1189.38	1189.38	1192.84	1188.79	1188.73	1188.87	1188.53	1188.52
8/12/1998	1190.04	1190.04	0.00	1190.57	1190.61	1189.58	1189.57	1192.98	1188.93	NM	1189.01	NM	1188.78
11/13/1998	1189.79	1189.79	0.00	1190.34	1190.32	1189.36	1189.34	1192.79	1188.75	1188.70	1188.83	1188.50	1188.54
2/10/1999	1189.58	1189.58	0.00	1190.17	1190.14	1189.19	1189.18	1192.64	1188.61	1188.58	1188.67	1188.36	1188.39
5/20/1999	1189.84	1189.84	0.00	1190.43	1190.40	1189.46	1189.49	1192.83	1188.88	1188.80	1188.91	1188.62	1188.62
8/13/1999	1190.56	1190.56	0.00	1190.74	1190.72	1189.90	1189.75	1193.13	1189.20	1189.14	1189.43	1188.95	1189.06
11/17/1999	1189.79	1189.79	0.00	1190.32	1190.28	1189.34	1189.32	1192.78	1188.77	1188.71	1188.85	1188.55	1188.58
2/3/2000	1189.63	1189.63	0.00	1190.21	1190.17	1187.21	1189.21	1192.69	1188.66	1188.66	1188.70	1188.42	1188.45
5/9/2000	1190.85	1190.85	0.00	1203.39	1204.46	1189.49	1199.82	1211.01	1188.94	1195.98	1189.01	1188.70	1197.85
8/7/2000	1189.72	1189.72	0.00	1190.32	1190.30	1189.33	1189.30	1192.81	1188.73	1188.65	1188.80	1188.48	1188.55
12/22/2000	1189.81	1189.81	0.00	1190.30	1190.24	1189.36	1189.38	1192.56	1188.79	1188.74	1188.86	1192.52	1188.60
2/6/2001	1189.69	1189.69	0.00	1190.20	1190.16	1189.27	1189.30	1211.01	1188.70	1188.65	1188.73	1192.52	1188.47
5/7/2001	1190.14	1190.14	0.00	1190.59	1190.57	1189.55	1189.57	1193.18	1188.91	1188.84	1188.97	1188.65	1188.67
8/2/2001	1190.28	1190.28	0.00	1190.75	1190.68	1189.73	1189.78	1193.10	1189.10	1189.08	1189.17	1188.83	1188.83
5/28/2002	1189.66	1189.66	0.00	1190.52	1190.47	1189.47	1189.50	NM	1188.85	1188.78	1188.90	1188.58	1188.61
2/3/2004	1189.71	1189.71	0.00	1190.19	1190.13	1189.23	1189.26	NM	1188.64	1188.62	1188.66	1188.41	1188.43
8/10/2004	1189.98	1189.98	0.00	1190.47	1190.39	1189.45	1189.50	NM	1188.85	1188.82	1188.92	1188.62	1188.64
2/4/2005	1189.73	1189.73	0.00	1190.27	1190.18	1189.28	1189.32	NM	1188.71	1188.67	1188.75	1188.47	1188.46
8/16/2005	1189.61	1189.61	0.00	1190.15	1190.07	1189.18	1189.20	NM	1188.59	1188.55	1188.63	1188.37	1188.38
2/28/2006	1189.60	1189.60	0.00	1190.09	1190.04	1189.12	1189.16	NM	1188.55	1188.52	1188.58	1188.32	1188.31
8/2/2006	1189.92	1189.92	0.00	1190.42	1190.37	1189.56	1189.53	NM	1188.98	1188.91	1189.20	1188.74	1188.82
1/10/2007	1189.56	1189.56	0.00	1190.09	1190.02	1189.13	1189.16	NM	1188.52	1188.49	1188.69	1188.28	1188.33
3/6/2008	1189.61	1189.61	0.00	1190.14	1190.09	1189.50	1189.26	NM	1188.66	1188.58	1188.72	1188.41	1188.52
8/5/2008	1189.87	NM	NM	1190.41	1190.37	1187.50	1189.48	NM	1188.89	1188.80	1189.01	1188.66	1188.83
3/4/2009	1189.58	NM	NM	1190.10	1190.05	1189.19	1189.21	NM	1188.62	1188.56	1188.68	1188.38	1188.45
8/4/2009	1189.73	NM	NM	1190.24	1190.22	1189.74	1189.32	NM	1188.78	1188.67	1188.88	1188.56	1188.73

ABBREVIATIONS

NM = Not Measured

NI = Not Installed

MW = Monitoring Well

State of Wisconsin	Immediate of Off Courses Dreamouter Information
Department of Natural Resources http://dnr.wi.gov	Impacted Off-Source Property Information Form 4400-246 (R 3/08)

This fillable form is intended to provide a list of information that must be submitted for evaluation for case closure. It is to be used in conjunction with Form 4400-202, Case Closure Request (Section H). 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	#:	02-58-000049			
ACTIV	ITY NAME:	NORTHERN LAKES COOP			
ID		Off-Source Property Address	Parcel Number	WTM X	WTM Y
Α	15212 C	Chippewa Trail, Hayward, WI 54843 (Kretschmer Property)	57-010-2-41-09-26-1 03-000-000010	407556	615603
В	No Phys	sical Address - American Birkebiner Ski Foundation Property	57-010-2-41-09-26-1 03-000-000020	407595	615634
С	15216 C	Chippewa Trail, Hayward, WI 54843 (Sawyer County Property)	57-010-2-41-09-26-1 03-000-000150	407521	615603
D					
E					
F					
G					
Н					
I					



P.O. BOX 985 · HAYWARD, WISCONSIN 54843-0985

Sawyer County Clerk Sawyer County Courthouse 10610 Main Street, Suite 10 Hayward, WI 54843

Residual Soil and Ground Water Contamination

Northern Lakes Cooperative Bulk Plant

P.O. Box 985

Hayward, Wisconsin 54843-0985

BRRTS No. 02-58-000049

#### To Whom It May Concern:

Soil and ground water contamination that appears to have originated on the Northern Lakes Cooperative Bulk Plant property located along West Chippewa Trail Road, Hayward, Wisconsin has migrated onto the West Chippewa Trail Road right-of-way south of the property known as the Northern Lakes Cooperative Bulk Plant along Chippewa Trail Road, Hayward, Sawyer County, Wisconsin (see attached maps). It is my understanding that the Town of Hayward has jurisdiction for this right-of-way area. The levels of petroleum contamination in the soil and ground water on the right-of-way property are above the state ground water enforcement standards found in chapter NR 140. Wisconsin Administrative Code, and state soil enforcement standards found in chapter NR 720. Wisconsin Administrative Code. However, the environmental consultants who have investigated this contamination have informed me that this ground water contaminant plume is stable or receding and will naturally degrade over time. The remaining contaminants in soil will also naturally degrade with time. I believe that allowing natural attenuation to complete the cleanup at this site will meet the requirements for case closure that are found in chapter NR 726 and Comm 46, Wisconsin Administrative Code, and I will be requesting that the Wisconsin Department of Natural Resources accept natural attenuation as the final remedy for this site and grant case closure. Closure means that the Department will not be requiring any further investigation or cleanup action to be taken. other than the reliance on natural attenuation. A copy of a "Fact Sheet" prepared by the Wisconsin Department of Natural Resources (WDNR) pertaining to natural attenuation is enclosed. One condition of closure is to provide written notification of the presence of the remaining contaminants to the clerk of the town and county where the right-of-way is located, as well as to the municipal or state agency that maintains the right-of-way. Because this right-of-way is located within Sawyer County, this letter serves as the required notification.

The Department of Natural Resources will not review my closure request for at least 30 days after the date of this letter. As an affected property owner, you have a right to contact the Department to provide any technical information that you may have that indicates that closure should not be granted for this site. If you would like to submit any information to the Department Natural Resources that is relevant to this closure request, you should mail that information to:

Mr. Jamie Dunn Wisconsin Department of Natural Resources 810 West Maple Street Spooner, WI 54801

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If this case is closed, all properties within the site boundaries where soil and ground water contamination exceeds enforcement standards will be listed on the Department of Natural Resources' geographic information system (GIS) Registry of Closed Remediation Sites. The information on the GIS Registry includes maps showing the location of properties in Wisconsin where ground water contamination above chapter NR 140 enforcement standards was found at the time that the case was closed. This GIS Registry will be available to the general public on the Department of Natural Resources' Internet website. Please review the enclosed legal description of your property, and notify me within the next 30 days if the legal description is incorrect.

Once the Department makes a decision on my closure request, it will be documented in a letter. If the Department grants closure, you may obtain a copy of this letter by requesting a copy from me, by writing to the agency address given above or by accessing the DNR GIS Registry of Closed Remediation Sites on the internet at <a href="http://dnrmaps.wisconsin.gov/imf/imf.jsp?site=brrts2">http://dnrmaps.wisconsin.gov/imf/imf.jsp?site=brrts2</a>. A copy of the closure letter is included as part of the site file on the GIS Registry of Closed Remediation Sites.

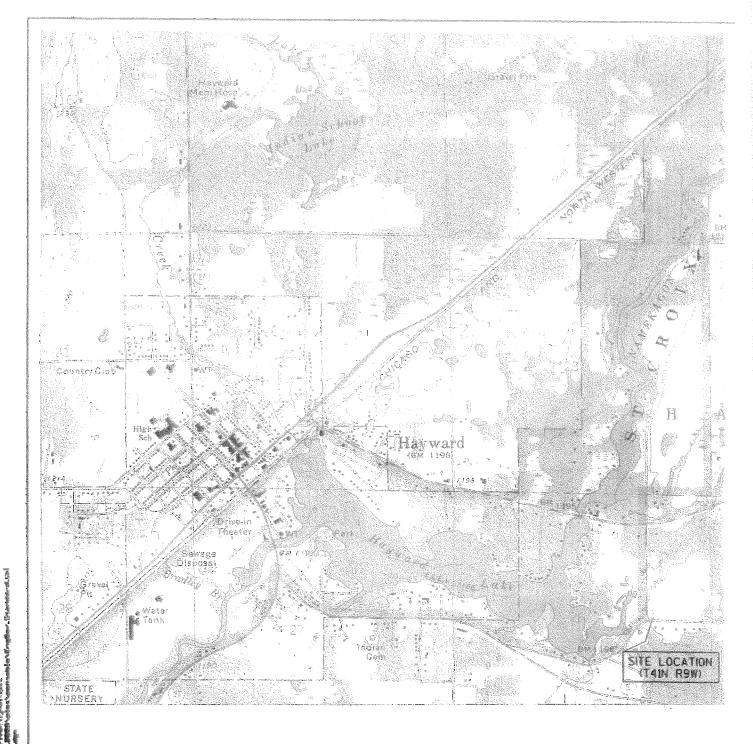
If you need more information, you may contact me at P.O. Box 985, Hayward, Wisconsin, 54843-0985, (Telephone No. 715-634-3211), or you may contact Jamie Dunn at the address shown above (Telephone No. 715-635-4049).

Sincerely,

Mike Covelli

Northern Lakes Cooperative

**Enclosures** 



NOTE: THIS DRAWING WAS PREPARED
IN COLOR. REPRODUCTION BY
MEANS OTHER THAN EQUIVALENT
COLOR COPYING NAY CAUSE
SOME DATA TO BE LOST OF
MISREPPESENTED

USGS MAP: HAYWARD QUADRANGLE 1971

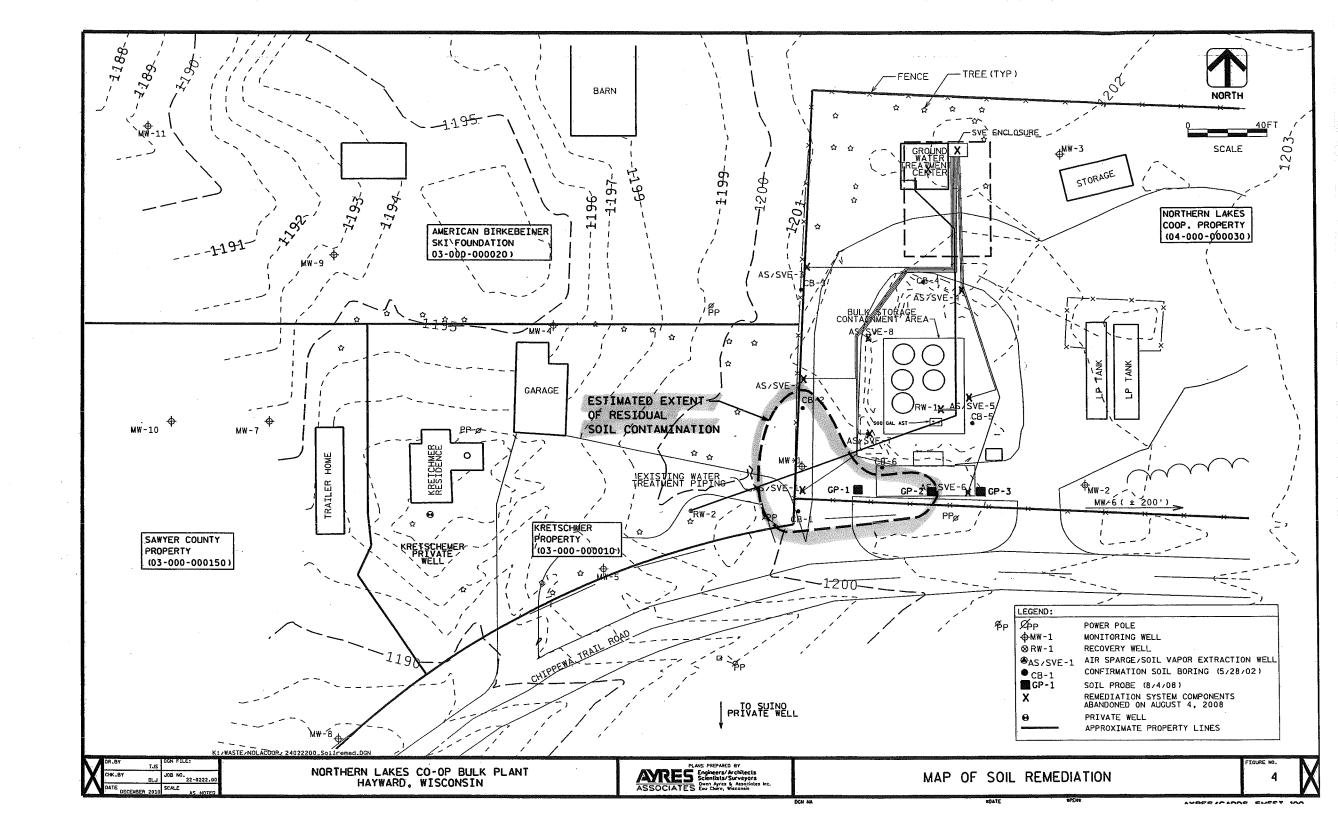


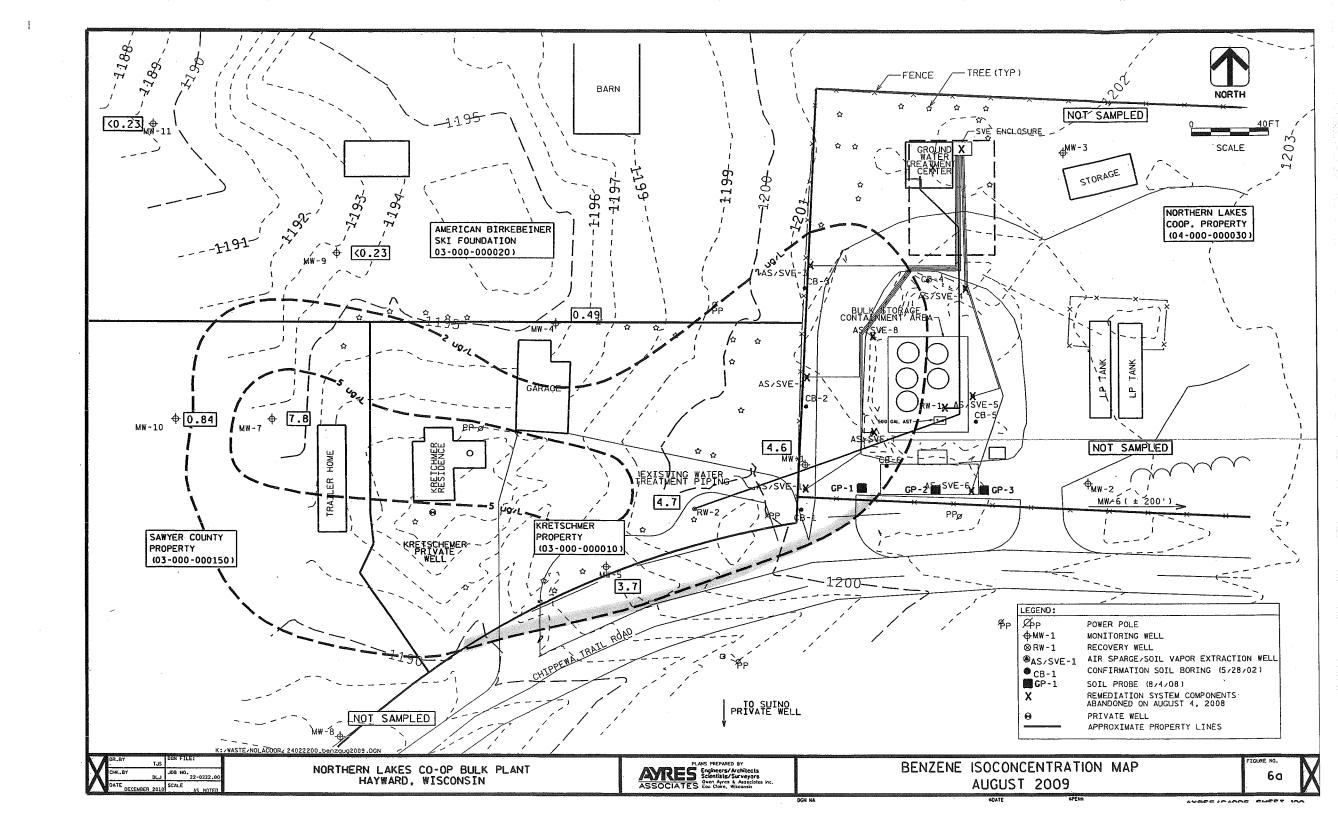
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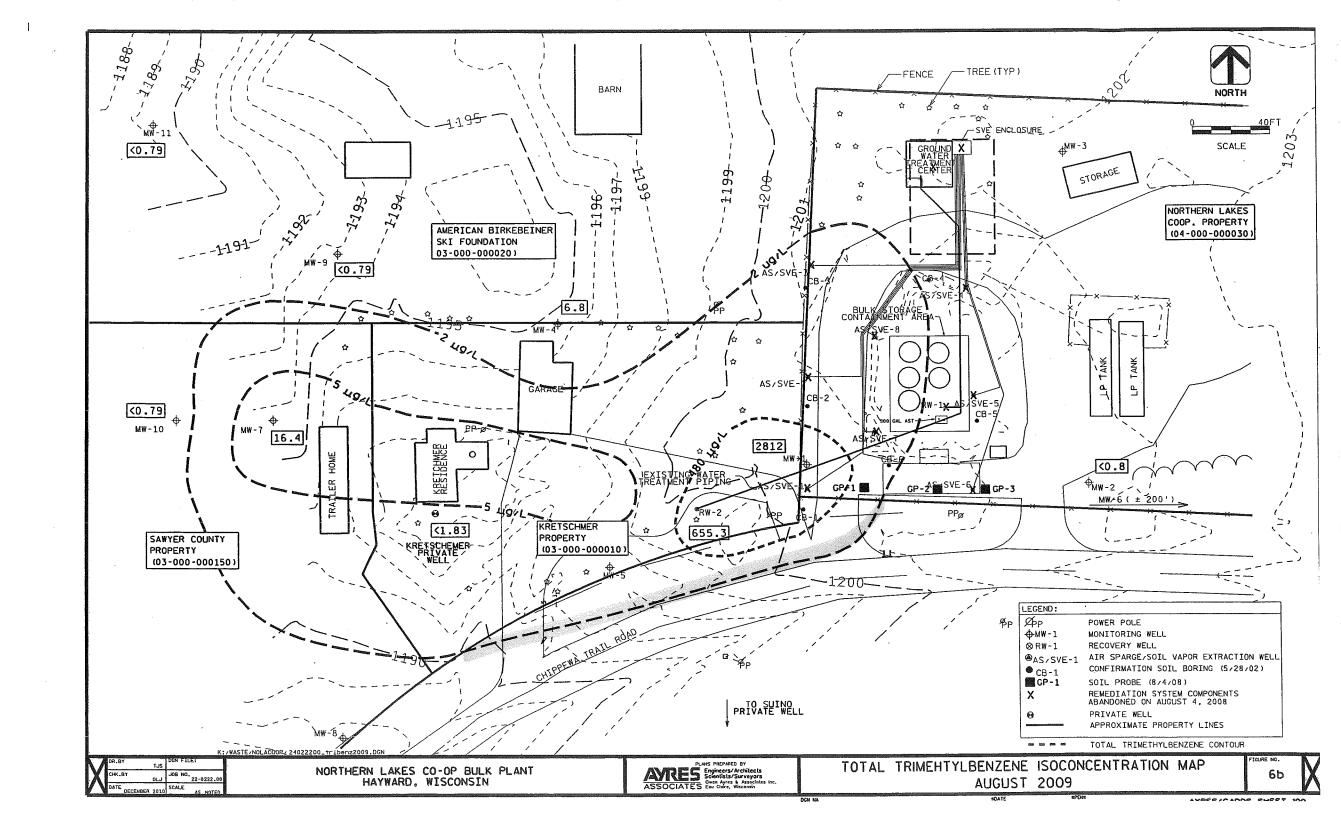
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USGS REGIONAL LOCATION MAP

FIGURE







### **Fact Sheet**

# What Landowners Should Know: Information About Using Natural Attenuation To Clean Up Contaminated Groundwater

#### What Is Natural Attenuation?

Natural attenuation makes use of natural processes in soil and groundwater to contain the spread of contamination and to reduce the amount of contamination from chemical releases.

Natural attenuation is an *in-situ* treatment method. This means that contaminants are left in place while natural attenuation works on them. Natural attenuation is relied upon to clean up contamination that remains after the source of the contamination is removed. An example of a source of contamination would be a leaking underground petroleum tank.

#### **How Does Natural Attenuation Work?**

Natural attenuation processes work at many sites, but the rate and degree of effectiveness varies from property to property, depending upon the type of contaminants present and the physical, chemical and biological characteristics of the soil and groundwater.

Natural attenuation processes can be divided into two broad categories — destructive and non-destructive. Destructive processes destroy contaminants. The most common destructive process is biodegradation.

Non-destructive processes do not destroy the contaminant, but reduce contaminant concentrations in groundwater through dilution, dispersion or adsorption.

#### **Biodegradation**

Biodegradation is a process in which microorganisms (e.g. yeast, fungi, or bacteria) that naturally occur in soil and groundwater break down, or degrade, hazardous substances to less toxic or non-toxic substances.

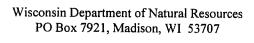
Microorganisms, like humans, eat and digest organic compounds for nutrition and energy (organic compounds contain carbon and hydrogen atoms).

Some types of microorganisms can digest organic substances such as fuels or solvents that are hazardous to humans. Microorganisms break down the organic contaminants into harmless products — mainly carbon dioxide and water. Once the contaminants are degraded, the microorganism populations decline because they have used their food sources. These small populations of microorganisms pose no contaminant or health risk.

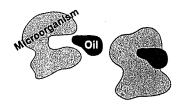
Many organic contaminants, like petroleum, can be biodegraded by microorganisms in the underground environment. For example, biodegradation processes can effectively cleanse soil and groundwater of hydrocarbon fuels such as gasoline and benzene, toluene, ethylbenzene, and xylene – known as the BTEX compounds, under certain condtions.



October 2001 RR-671







Microorganisms eat oil or other organic contaminant



Microorganisms digest oil and convert it to carbon dioxide (CO<sub>2</sub>) and water (H<sub>2</sub>O)



Microorganisms give off CO<sub>2</sub> and H<sub>2</sub>O

Figure 1. Schematic Diagram of Aerobic Biodegradation in Soil

Biodegradation can also breakdown other contaminants in groundwater such as trichloroethylene (TCE), a chlorinated solvent used in metal cleaning. However, the processes involved are harder to predict and are less effective at contaminant removal compared to petroleum-contaminated sites

#### **Dilution and Dispersion**

The effects of dilution and dispersion reduce contaminant concentrations but do not destroy contaminants. Clean water from the surface seeps underground to mix with and dilute contaminated groundwater.

Other processes that lead to reduced concentrations of contaminants include clean groundwater flowing into contaminated areas, and the dispersion of pollutants as they spread out and away from the main path of the contaminated plume.

#### Adsorption

Adsorption occurs when contaminants attach or "sorb" to underground particles. Most oily substances (like petroleum compounds) repel water and escape from the groundwater by attaching to organic matter and clay minerals in the subsurface.

This process holds back or retards contaminant movement and reduces the concentration of contaminants in the groundwater. However, like dilution and dispersion, adsorption does not destroy contaminants.

### Why Consider Natural Attenuation To Clean Up Soil And Groundwater?

In certain situations, natural attenuation is an effective, inexpensive cleanup option and the most appropriate way to remediate some contamination problems. Natural attenuation focuses on confirming and monitoring natural remediation processes rather than relying on engineered or "active" technologies (such as pumping groundwater, treating it above ground, then disposing of the treated water).

Contaminants from petroleum are good candidates for natural attenuation because they are among the most easily destroyed by biodegradation. Natural attenuation is non-invasive, which allows treatment to go on below ground, while the surface can continue to be used.

Natural attenuation can also be less costly than active engineered treatment options, and requires no special equipment, energy source, or disposal of treated soil or groundwater.

### Will Natural Attenuation Work At My Property?

Whether natural attenuation will work at a particular location is determined by investigating the soil and groundwater. These investigations determine the type of contaminants present, the levels of contamination, and the physical and chemical conditions that lead to biodegradation of the contaminants.

In order to rely on natural attenuation, responsible parties are required to confirm that natural attenuation processes are working by monitoring the soil and groundwater over a period of time to show that the contaminant concentrations are decreasing and that the contamination is no longer spreading.

Those conducting the cleanup need to know whether natural attenuation, or any proposed remedy, will reduce the contaminant concentrations in the soil and groundwater to legally acceptable limits within a reasonable period of time.

Natural attenuation may be an acceptable option for sites where active remediation has occurred and has reduced the concentration of contaminants (for instance, removing leaking underground tanks and contaminated soil).

However, natural attenuation is not an appropriate option at all sites. If the contamination has affected a drinking water well, or has entered a stream or lake, active cleanup options may be necessary to make sure people and the environment are protected from direct contact with the contamination.

The speed or rate of natural attenuation processes is typically slow. Monitoring is necessary to show that concentrations decrease at a sufficient rate to ensure that contaminants will not become a health threat in the future.

#### Closure Of Contaminated Sites Using Natural Attenuation As A Final Remedy

When contamination is discovered at a property (such as a gas station with leaking underground tanks), the person who is responsible for causing the contamination, and persons having possession or control of hazardous substances that have been discharged, have the responsibility to remove the source of contamination and investigate and clean up the contamination that has escaped into the soil and groundwater.

The contaminant release must be reported to the Wisconsin Department of Natural Resources (DNR) and the site investigation and cleanup are

overseen by a state agency. Depending on the type of contaminant, the oversight agency could be the Department of Agriculture, Trade and Consumer Protection; Department of Commerce; or Department of Natural Resources.

When the cleanup has complied with state standards, the person responsible for the contamination will ask the state agency for closure of the case. If natural attenuation is relied upon to finish cleaning up a contaminated property after closure, the responsible person will need to show that contaminant concentrations are not spreading, that contaminant concentrations are stable or decreasing, and that the concentrations will decrease in the future until state groundwater standards are met.

Because natural attenuation processes are slow, it may take many years before the properties with contamination are clean. State rules require that all owners of properties where groundwater contamination has spread must be informed of the contamination below their property.

In addition, the properties with groundwater contamination exceeding state groundwater enforcement standards must be listed on a database to notify future owners and developers of the presence of contamination. If future monitoring occurs and shows that natural attenuation processes have removed the contaminants to state-required cleanup levels, then the properties can be removed from the database.

The state agency will grant closure if the site investigation and monitoring shows that natural attenuation will clean up groundwater to state standards within a reasonable period of time. All state rules for cleanup must be met and the person who is responsible for the contamination must comply with all conditions of the state's closure approval.

#### For More Information

The following publications provide additional information on natural attenuation. Web sites

where these can be downloaded free of charge are also listed.

- A Citizen's Guide to Bioremediation, April 1996, EPA 542-F-96-007; http://www.epa. gov/tio/productions/citguide/natural.htm
- Commonly asked questions regarding the use of natural attenuation for petroleumcontaminated sites at federal facilities; November 20, 2000 http://www.epa.gov/swerffrr/petrol.htm.
- U.S. EPA Technology Fact Sheet: Monitored natural attenuation of petroleum hydrocarbons, May 1999, EPA 600-F-98-021; http://www.epa.gov/ada/download/ fact/pet-hyd.pdf.
- U.S. EPA Technology Fact Sheet:
   Monitored natural attenuation of
   chlorinated solvents, May 1999, EPA 600F-98-0022; http://www.epa.gov/ada/
   download/fact/chl-solv.pdf.
- Interim Guidance on Natural Attenuation for Petroleum Releases, WI DNR, Bureau for Remediation and Redevelopment, October, 1999, PUB-RR-614; http://www. dnr.state.wi.us/org/aw/rr/archives/ pubs/RR614.pdf.

#### Contacts

DNR, Central Office Terry Evanson, Hydrogeologist, 608-266-0941 evanst@dnr.state.wi.us

DNR, Northern Region Office Chris Saari, Hydrogeologist 715-372-8539 ext. 120 saaric@dnr.state.wi.us

DNR, Northeast Region Office Keld Lauridsen, Hydrogeologist 920- 492-5921 laurik@dnr.state.wi.us

DNR, South Central Region Office Pat McCutcheon, Team Supervisor 608-275-3241 mccutp@dnr.state.wi.us

DNR, Southeast Region Office Pam Mylotta, Hydrogeologist 414-263-8758 mylotp@dnr.state.wi.us

DNR, West Central Region Office Lisa Gutknecht, Hydrogeologist 715-359-6514 gutknL@dnr.state.wi.us

This document may contain some information about certain state statutes and rules but does not necessarily include all of the details found in the statutes/rules. Readers should consult the actual language of the statutes/rules to answer specific questions.

The Wisconsin Department of Natural Resources provides equal opportunity in its employment, programs, services, and functions under an Affirmative Action Plan. If you have any questions, please write to Equal Opportunity Office, Department of Interior, Washington, D.C. 20240.

This publication is available in alternative format upon request. Please call 608-267-3543 for more information.



P.O. BOX 985 · HAYWARD, WISCONSIN 54843-0985

February 25, 2011

Town of Hayward c/o Ms. Shannon O'Hare, Town Clerk 15460 West State Highway 77 East Hayward, WI 54843

Re: Residual Soil and Ground Water Contamination

Northern Lakes Cooperative Bulk Plant

P.O. Box 985

Hayward, Wisconsin 54843-0985

BRRTS No. 02-58-000049

Dear Ms. O'Hare:

Soil and ground water contamination that appears to have originated on the Northern Lakes Cooperative Bulk Plant property located along West Chippewa Trail Road, Hayward, Wisconsin has migrated onto the West Chippewa Trail Road right-of-way south of the property known as the Northern Lakes Cooperative Bulk Plant along Chippewa Trail Road, Hayward, Sawyer County. Wisconsin (see attached maps). It is my understanding that the Town of Hayward has jurisdiction for this right-of-way area. The levels of petroleum contamination in the soil and ground water on the right-of-way property are above the state ground water enforcement standards found in chapter NR 140. Wisconsin Administrative Code, and state soil enforcement standards found in chapter NR 720, Wisconsin Administrative Code. However, the environmental consultants who have investigated this contamination have informed me that this ground water contaminant plume is stable or receding and will naturally degrade over time. The remaining contaminants in soil will also naturally degrade with time. I believe that allowing natural attenuation to complete the cleanup at this site will meet the requirements for case closure that are found in chapter NR 726 and Comm 46, Wisconsin Administrative Code, and I will be requesting that the Wisconsin Department of Natural Resources accept natural attenuation as the final remedy for this site and grant case closure. Closure means that the Department will not be requiring any further investigation or cleanup action to be taken. other than the reliance on natural attenuation. A copy of a "Fact Sheet" prepared by the Wisconsin Department of Natural Resources (WDNR) pertaining to natural attenuation is enclosed. One condition of closure is to provide written notification of the presence of the remaining contaminants to the clerk of the town and county where the right-of-way is located, as well as to the municipal or state agency that maintains the right-of-way. Because this right-of-way is both located and under the jurisdiction of the Town of Hayward, this letter serves as the required notification.

Because the source of the soil and ground water contamination is not on the Town of Hayward property, neither you nor any subsequent owner of this property will be held responsible for investigation or cleanup of the soil and ground water contamination, as long as you and any subsequent owners comply with the requirements of section 292.13, Wisconsin Statutes, including allowing access to your property for environmental investigation or cleanup if access is required. For further information on the requirements of section 292.13, Wisconsin Statutes, you may call 1-800-

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367-6076 for calls originating in Wisconsin, or 608-264-6020 if you are calling from out of state or within the Madison area, to obtain a copy of the Department of Natural Resources' publication #RR-589, Fact Sheet 10: Guidance for Dealing with Properties Affected by Off-Site Contamination.

The Department of Natural Resources will not review my closure request for at least 30 days after the date of this letter. As an affected property owner, you have a right to contact the Department to provide any technical information that you may have that indicates that closure should not be granted for this site. If you would like to submit any information to the Department Natural Resources that is relevant to this closure request, you should mail that information to:

Mr. Jamie Dunn Wisconsin Department of Natural Resources 810 West Maple Street Spooner, WI 54801

If this case is closed, all properties within the site boundaries where soil and ground water contamination exceeds enforcement standards will be listed on the Department of Natural Resources' geographic information system (GIS) Registry of Closed Remediation Sites. The information on the GIS Registry includes maps showing the location of properties in Wisconsin where ground water contamination above chapter NR 140 enforcement standards was found at the time that the case was closed. This GIS Registry will be available to the general public on the Department of Natural Resources' Internet website. Please review the enclosed legal description of your property, and notify me within the next 30 days if the legal description is incorrect.

Should you or any subsequent property owner wish to construct or reconstruct a well on your property, special well construction standards may be necessary to protect the well from the residual ground water contamination. Any well driller who proposes to construct a well on your property in the future will first need to call the Diggers Hotline (1-800-242-8511) if your property is located outside of the service area of a municipally owned water system, or contact the Drinking Water program within the Department of Natural Resources if your property is located within the designated service area of a municipally owned water system, to determine if there is a need for special well construction standards.

Once the Department makes a decision on my closure request, it will be documented in a letter. If the Department grants closure, you may obtain a copy of this letter by requesting a copy from me, by writing to the agency address given above or by accessing the DNR GIS Registry of Closed Remediation Sites on the internet at <a href="http://dnrmaps.wisconsin.gov/imf/imf.isp?site=brrts2">http://dnrmaps.wisconsin.gov/imf/imf.isp?site=brrts2</a>. A copy of the closure letter is included as part of the site file on the GIS Registry of Closed Remediation Sites.

If you need more information, you may contact me at P.O. Box 985, Hayward, Wisconsin, 54843-0985, (Telephone No. 715-634-3211), or you may contact Jamie Dunn at the address shown above (Telephone No. 715-635-4049).

Sincerely,

Miké Covelli

Northern Lakes Cooperative

U.S. Postal Service:  CERTIFIED MAIL. RECEIPT (Domestic Mali Drif; No Insurance Coverage Provided)  For delivery information visit our website at www.usps.coms  Postage  Certified Fee  Return Receipt Fee (Endorsement Required)  Restricted Delivery Fee (Endorsement Required)  Total Postage & Fees  Sem Ms. Shannon O'Hare, Town Clerk  Sire Town of Hayward  or P  City  Hayward, WI 54843  PS T  Structions	U.S. Postal Service CERTIFIED MAIL RECEIPT (Domestic Mail Only: No Insurance Goverage Provided)  For delivery information visit our website at www.usps.como Postage Postage FEB Return Receipt Fee (Endorsement Required) Restricted Delivery Fee (Endorsement Required) Total Postage & Fees  Sent To Sawyer County Clerk Sireet, Apr. N Sawyer County Courthouse or PO Box Nt City, State, Z Hayward, WI 54843 PS Form 380
SENDER: COMPLETE THIS SECTION  Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.  Print your name and address on the reverse so that we can return the card to you.  Attach this card to the back of the mailpiece, or on the front if space permits.  1. Article Addressed to:  Sawyer County Clerk Sawyer County Courthouse 10610 Main Street, Suite 10 Hayward, WI 54843	A. Signature  X  B. Received by (Printed Name)  D. Is delivery address different from item 1? Yes  If YES, enter delivery address below:  No  3. Service Type  Accertified Mail  Registered  Return Receipt for Merchandise  Insured Mail  Restricted Delivery? (Extra Fee)  Yes
	COMPLETE THIS SECTION ON DELIVERY  A. Signature  A. Signature  Addressee  B. Received by (Printed Name)  D. Is delivery address different from item 1?   Yes  If YES, enter delivery address below:   No  3. Service Type  Certified Mail   Express Mail   Registered   Return Receipt for Merchandise   Insured Mail   C.O.D.  4. Restricted Delivery? (Extra Fee)   Yes